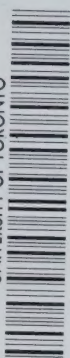


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Canadian
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January
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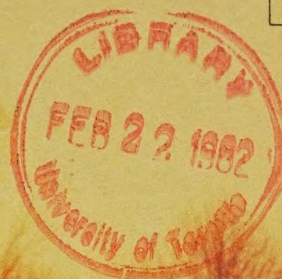
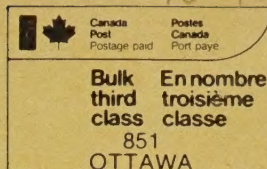
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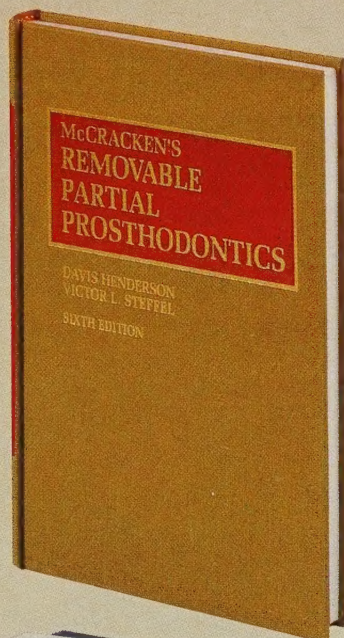
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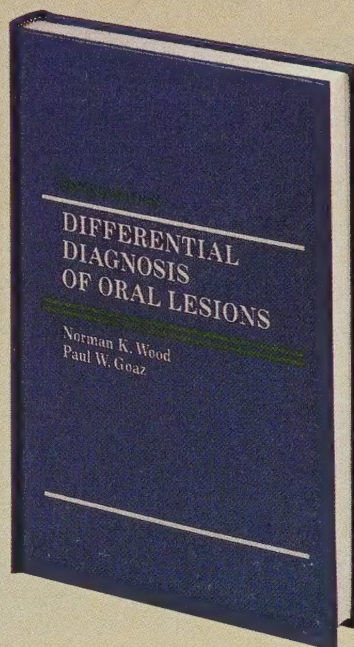
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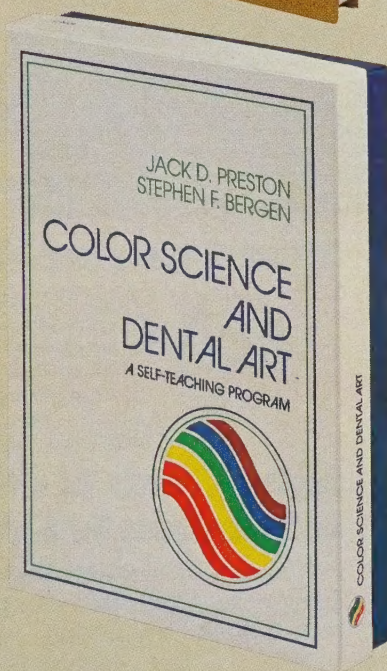
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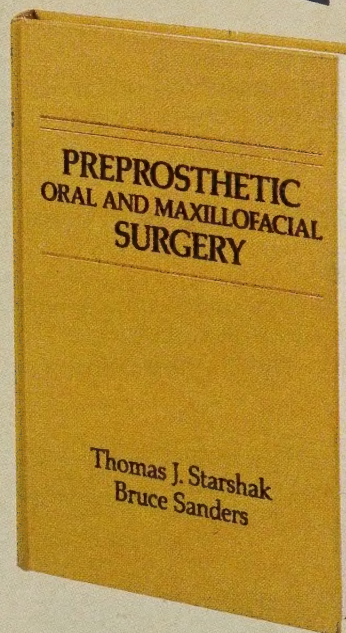
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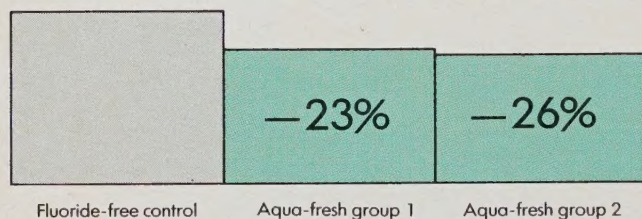


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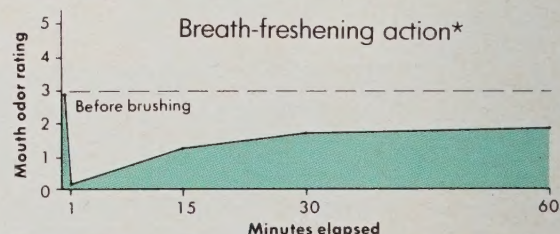


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Dr. Donald Williams says CDA has the "ear" of government and continues to deal with the most current issues facing the dental profession.

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Introduction to Dental Statistics

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The organizational structure of CDA is described in detail for the information of members.

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Ms. Margo Beres has been appointed as CDA's librarian and offers her views on the role of the library.

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Dr. Derek Jones reports on the South African ISO/TC 106 meeting.

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A complete directory of CDA officials is published.

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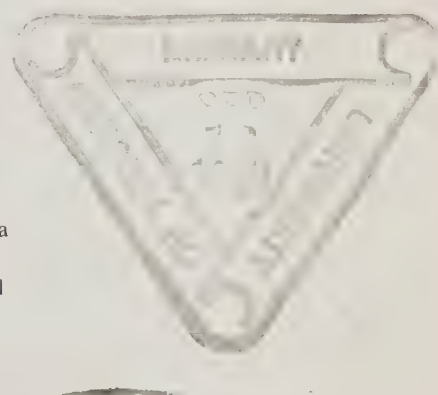
"Epilepsy and the Oral Manifestations of Phenytoin Therapy"

"There is a real place in dentistry for monographs on a variety of subjects and, even more, there is a need for good ones. This one is very good indeed..."

28

An Atlas of Pedodontics

"...the book is recommended as a worthwhile reference for pedodontics in general practice."

**Journal**Restorative
Dentistry

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ISSN 0709 8936

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1982

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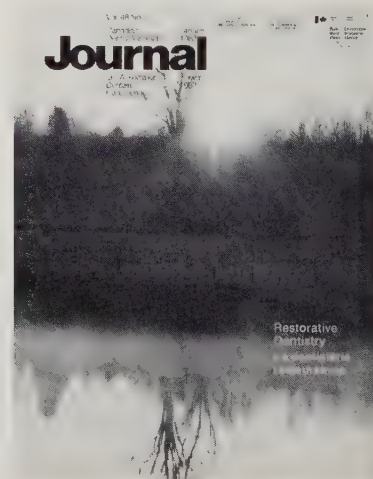
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La dentisterie
restauratrice



CDA HAS THE "EAR" OF GOVERNMENT

In this age of consumerism and government regulation, the politics of dentistry is as important as marketing and clinical skills.

As the national voice of Canada's dental profession, based in the country's capital, CDA has the "ear" of government. As a result, the views and concerns of dentists can be quickly expressed and dealt with.

The Canadian Dental Association provides a national perspective to upcoming trends, and as an active association, we are in the position to knowledgeably address policy questions at the federal level.

One of the priorities facing our profession is manpower.

The CDA has commissioned a national manpower study to deal with this issue.

We have to ask why more and more dentists are reporting they are not busy enough.

The increase in the number of dentists entering the profession and declining population growth, along with increased productivity and refinements in dental technology have all played a contributing role in the current situation.

CDA may not be able to develop an instant solution, but it can provide an essential information link between provinces, and a national outlook.

In pinpointing general trends, seeking out future developments and exchanging knowledge, CDA can assist in the search for a solution to the manpower problem.

Organized dentistry, as well as looking after its own concerns, must ultimately strive to make the public aware

of the necessity of good, basic dental health. This is another role fulfilled by your national organization. Educational pamphlets are produced and updated regularly, and National Dental Health Month is heartily supported and given great impetus by CDA.

In order to ensure that we meet our goal of public awareness, we must consider our accreditation program one of the most vital of our activities.

It not only protects the public by ensuring a universal standard of dental education, but also provides the dental student with a relevant, viable education which qualifies him to practise anywhere in Canada. It assures him preparation for graduate studies and a universality of training that permits him to exchange ideas with dentists around the world.

This process that serves the student so well must be protected by all generations.

Your national organization is just that — YOUR national voice, and YOUR representative with government, other professions and other dentists.

You can communicate with each other and learn through this association, and as president, may I ask you to consider seriously what role you can play to assist the Canadian Dental Association continue its valuable contribution to our profession.

Dr. Donald Williams
President

L'A.D.C. A SES ENTRÉES AU GOUVERNEMENT

En ce temps où prévalent les lois gouvernementales et la consommation, les politiques relatives à la dentisterie sont aussi importantes que les transactions du marché et les aptitudes cliniques.

En tant que porte-parole national de la profession dentaire au Canada, l'Association dentaire canadienne, établie dans la capitale du pays, a ses entrées au gouvernement. Il s'ensuit que les dentistes peuvent faire rapidement connaître leurs opinions et leurs préoccupations de manière à ce qu'on en tienne compte.

L'Association dentaire canadienne fournit un point de vue national sur les questions courantes et, en tant qu'organisme actif, est en mesure de traiter en connaissance de cause les problèmes politiques qui se situent au niveau fédéral.

Actuellement, le premier problème touchant la profession dentaire est la main-d'oeuvre.

L'A.D.C. a commandé une importante étude nationale sur la main-d'oeuvre pour résoudre ce problème.

Il convient de savoir pourquoi de plus en plus de dentistes se plaignent de n'être pas suffisamment occupés.

Le nombre croissant de dentistes, la baisse de l'augmentation de la population ainsi qu'un accroissement de la productivité et un perfectionnement des techniques dentaires sont tous des facteurs qui ont contribué à créer la situation actuelle.

L'A.D.C. ne sera peut-être pas en mesure de proposer une solution miracle à ce problème, mais elle peut établir un réseau de renseignements entre les provinces et faire valoir le point de vue national.

En indiquant les tendances générales, en cherchant à découvrir qu'elles seront les orientations de l'avenir et en distribuant des renseignements, l'A.D.C. peut fournir une aide précieuse pour trouver une solution au problème de la main-d'oeuvre.

Tout en s'occupant de ses problèmes, l'art dentaire doit, en tant qu'organisation, tâcher de faire en sorte que le public soit conscient de la nécessité de jouir d'une bonne santé dentaire. Ce rôle est déjà assumé par l'Association dentaire canadienne qui prépare et met régulièrement à jour des brochures éducatives et qui appuie énergiquement le Mois national de la santé dentaire.

Afin de nous assurer que nous atteignons nos objectifs touchant l'éducation du public, nous devons tenir compte des programmes d'agrément et les considérer comme l'une de nos activités essentielles.

À titre d'association nationale, nous reconnaissons que notre plus grande responsabilité est l'agrément des programmes d'éducation.

Il s'agit pour nous non seulement de protéger le public en établissant des normes universelles d'éducation dentaire, mais aussi de fournir à l'étudiant en dentisterie des connaissances appropriées qui lui permettront d'exercer sa profession n'importe où au Canada. En retour, l'étudiant est préparé à poursuivre ses études au niveau supérieur et obtient une formation universelle qui lui permet d'échanger des idées avec les dentistes du monde entier.

Cette méthode favorise l'étudiant. Aussi devons-nous la conserver pour les générations futures.

Votre organisation nationale constitue VOTRE porte-parole national. Elle VOUS représente auprès du gouvernement, des autres professions et des autres dentistes.

Vous pouvez faire des échanges avec vos confrères et parfaire vos connaissances grâce à cette association. À titre de président, je vous demande de réfléchir sérieusement au rôle que vous pouvez jouer pour aider l'Association dentaire canadienne à continuer à servir notre profession d'une façon valable pour tous.

Dr Donald Williams,
Président

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1. Zacherl, W. A., "Clinical Evaluation of a Sodium Fluoride-Silica Abrasive Dentifrice." *Journal of Dental Research*, Vol. 60, Special Issue A, page 577, March, 1981.

2. Beiswanger, B. B., Gish, C. W. and Mallatt, M. E., "Effect of a Sodium Fluoride-Silica Abrasive Dentifrice Upon Caries." *Journal of Dental Research*, Vol. 60, Special Issue A, page 577, March, 1981.

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In the cross-sectioned Bioblend Tooth above, the colors have been intensified to emphasize the multiple layers of porcelain.

Obituaries/ Nécrologies

RAHAM, P.N. Dr. Raham of Oakville, Ont. was born in 1948 and graduated from the University of Toronto in 1976.

MARLING, Milton A., July 8, 1981. Dr. Marling was born in 1902 and graduated from the University of Toronto in 1930. He practised dentistry in Brantford, Ont. for 45 years.

RIFFEL, J.C. Dr. Riffel of Toronto was born in 1920 and graduated from the University of Toronto in 1945.

DAVID, Jacques, décédé le 5 mai, 1981. Dr. David de Acton Vale, Québec est née en 1924 et a gradué de l'Université de Montréal en 1950.

TRUDEL, Jean, décédé le 10 octobre, 1981. Dr. Trudel de Québec est née en 1920 et a gradué de l'Université de Montréal en 1950.

Motrin (ibuprofen)

Product Information

Action: Ibuprofen has demonstrated anti-inflammatory, analgesic and antipyretic activity in animal studies designed to specifically demonstrate these effects. Ibuprofen has no demonstrable glucocorticoid effect.

Following a single 200 mg dose of ibuprofen in humans, useful blood levels were demonstrable in 45 minutes and still present in six hours but at barely detectable levels. Peak levels occurred at approximately one hour after ingestion. Levels were lower when taken in conjunction with food.

Ibuprofen is rapidly metabolized and eliminated in the urine. The excretion of ibuprofen is virtually complete 24 hours after the last dose. The serum half-life of ibuprofen is 1.8 to 2 hours. There is no evidence of drug accumulation or enzyme induction.

Ibuprofen has been found to be less likely to cause gastro-intestinal bleeding in doses usually used than is acetylsalicylic acid.

Clinical trials in man have shown activity of a dose of 1200-1800 mg of ibuprofen daily to be similar to that of 3.6 grams of acetylsalicylic acid daily.

Indications and Clinical Uses: Motrin (ibuprofen) is indicated for the treatment of rheumatoid and osteoarthritis. Motrin is also indicated for the relief of mild to moderate pain, accompanied by inflammation, in conditions such as musculo-skeletal trauma and post-dental extraction. Motrin is also indicated for the relief of pain associated with dysmenorrhea.

Contraindications: Ibuprofen should not be used in patients who have previously exhibited hypersensitivity to it, or in individuals with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to acetylsalicylic acid or other nonsteroidal anti-inflammatory agents. (see WARNINGS).

Ibuprofen should not be used during pregnancy, in nursing mothers or in pediatric patients because its safety under these conditions has not been established.

Warnings: Anaphylactoid reactions have occurred in patients with known A.S.A. hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported in patients receiving ibuprofen. Peptic ulceration, perforation, or severe gastrointestinal bleeding can have a fatal outcome, and although few such reports have been received with ibuprofen, a cause and effect relationship has not been established. Ibuprofen should be given under close supervision to patients with a history of upper gastrointestinal tract disease.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in colour vision have been reported. If a patient develops such complaints while receiving ibuprofen, the drug should be discontinued and the patient should have an ophthalmologic examination.

Fluid retention and edema have been reported in association with ibuprofen, therefore, the drug should be used with caution in patients with a history of cardiac decompensation or renal disease.

Ibuprofen, like other nonsteroidal anti-inflammatory agents, can inhibit platelet aggregation but the effect is quantitatively less and of shorter duration than that seen with acetylsalicylic acid. Ibuprofen has been shown to prolong bleeding time (but within the normal range) in normal subjects. Because this prolonged bleeding effect may be exaggerated in patients with underlying hemostatic defects, ibuprofen should be used with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients on ibuprofen should be cautioned to report to their physicians signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

When ibuprofen is added to the treatment program of patients who have been on prolonged corticosteroid therapy, and it is decided to discontinue this therapy, the corticosteroid should be tapered slowly to avoid exacerbation of disease or adrenal insufficiency.

Aseptic meningitis has been reported in connection with ibuprofen therapy in patients with systemic lupus erythematosus. Such patients may also develop hypersensitivity reactions to ibuprofen such as fever, rash or abnormal liver function more often than those with other disorders. Caution should therefore be exercised when considering ibuprofen therapy for patients with systemic lupus erythematosus.

Drug Interactions

Coumarin-type anticoagulants - Several short-term controlled studies failed to show that ibuprofen significantly affected prothrombin times or a variety of other clotting factors when administered to individuals on coumarin-type anticoagulants. However, because bleeding has been reported when ibuprofen and other nonsteroidal anti-inflammatory agents have been administered to patients on coumarin-type anticoagulants, the physician should be cautious when administering ibuprofen to patients on anticoagulants.

A.S.A.: Animal studies show that A.S.A. given with nonsteroidal anti-inflammatory agents including ibuprofen yields a net decrease in anti-inflammatory activity with lowered blood levels of the non-A.S.A. drug. Single dose bioavailability studies in normal volunteers have failed to show an effect of A.S.A. on ibuprofen blood levels. Correlative clinical studies have not been done.

Adverse Reactions: The following adverse reactions have been noted in patients treated with ibuprofen:

Note: Reactions listed below under Causal Relationship Unknown, are those which occurred under circumstances where a causal relationship could not be established. However, in these rarely reported events, the possibility of a relationship to ibuprofen cannot be excluded.

Gastrointestinal: The adverse reactions most frequently seen with ibuprofen therapy involve the gastrointestinal system.

Incidence 3 to 9%: nausea, epigastric pain, heartburn
Incidence 1 to 3%: diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the gastrointestinal tract (bloating or flatulence)

Incidence less than 1%: gastric or duodenal ulcer with bleeding and/or perforation, gastrointestinal hemorrhage, melena, hepatitis, jaundice, abnormal liver function (SGOT, serum bilirubin and alkaline phosphatase)

Central Nervous System:

Incidence 3 to 9%: dizziness

Incidence 1 to 3%: headache, nervousness

Incidence less than 1%: depression, insomnia

Causal relationship unknown: paresthesias, hallucinations, dream abnormalities

Dermatologic

Incidence 3 to 9%: rash (including maculopapular type)

Incidence 1 to 3%: pruritis

Incidence less than 1%: vesiculobullous eruptions, urticaria, erythema multiforme

Causal relationship unknown: alopecia, Stevens-Johnson syndrome

Special Senses

Incidence 1 to 3%: tinnitus

Incidence less than 1%: amblyopia (blurred and/or diminished vision, scotomata and/or changes in colour vision). Any patient with eye complaints during ibuprofen therapy should have an ophthalmological examination (see PRECAUTIONS).

Causal relationship unknown: conjunctivitis, diplopia, optic neuritis.

Metabolic.

Incidence 1 to 3%: decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Hematologic.

Incidence less than 1%: leukopenia and decreases in hemoglobin and hematocrit

Causal relationship unknown: hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes (e.g. purpura, epistaxis, hematuria, menorrhagia)

Cardiovascular.

Incidence less than 1%: congestive heart failure in patients with marginal cardiac function, elevated blood pressure

Causal relationship unknown: arrhythmias (sinus tachycardia, sinus bradycardia, palpitations).

Allergic:

Incidence less than 1%: anaphylaxis (see CONTRAINDICATIONS).

Causal relationship unknown: fever, serum sickness, lupus erythematosus syndrome.

Endocrine:

Causal relationship unknown: gynecomastia, hypoglycemic reaction.

Renal:

Causal relationship unknown: decreased creatinine clearance, polyuria, azotemia.

Symptoms and Treatment of Overdosage: A nineteen month old child weighing 12 kg ingested from 2800 to 4000 mg and presented with apnea, cyanosis and responded only to painful stimuli. Oxygen and parenteral fluids were given and at 12 hours she appeared completely recovered. Two other children (10 kg each) ingested 1200 mg of ibuprofen each and there were no signs of acute intoxication or late sequelae. A 19 year old male who had ingested 8000 mg of ibuprofen reported dizziness, and nystagmus was noted. He recovered with no reported sequelae after parenteral hydration and three days' bed rest.

In cases of acute overdosage, the stomach should be emptied by vomiting or lavage, though little drug will likely be recovered if more than an hour has elapsed since ingestion. Because the drug is acidic and is excreted in the urine, it is theoretically beneficial to administer alkali and induce diuresis.

Dosage and Administration: Rheumatoid arthritis and osteoarthritis: The initial daily dosage in adults is 1200 mg divided into 3 or 4 equal doses. Depending on the therapeutic response, the dose may be adjusted downward or upward. The daily dosage should not exceed 2400 mg.

Maintenance therapy, once maximum response is obtained, will range from 800 to 1200 mg per day.

Mild to moderate pain associated with inflammation, dysmenorrhea: 400 mg repeated as required every 4 to 6 hours. The daily dosage should not exceed 2400 mg.

Children: Due to the lack of clinical experience, ibuprofen is not indicated for use in children under 12 years of age.

Supplied: 200 mg (yellow), 300 mg (white), 400 mg (orange) sugar-coated tablets and 600 mg (peach) film-coated tablets in bottles of 100 and 1000.

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Letters

The Quacks Within Our Profession

There have always been quacks and probably always will be. Patients, often frustrated by the failure of orthodox methods to relieve their pain or cure their cancer, will, in desperation, seek out these practitioners and, because of natural remission placebo effects or simple blind faith, some of them improve. The medical profession has had little alternative to accepting these charlatans so long as they practised outside the profession but, when its own members have started to use unorthodox or unproven methods there has always been opposition.

We are now encountering in dentistry a most disturbing phenomenon — the attempt to introduce our colleagues to pseudoscientific unproven methods of diagnosis and treatment under the general heading of 'holistic dentistry'.

What is the aim of holistic dentistry? We are told this is to consider the patient as a whole and not simply deal with localized disease. One could hardly argue with this; it is an approach many of us have been advocating for many years. The difficulty starts when one looks at the types of treatment advocated by devotees of holistic dentistry. These include electro-acupuncture, cranial osteopathy, biomagnetic therapy and dental kinesiology. If there is any evidence that any of these diagnostic and treatment methods has any merit

I have yet to see it. Members of our profession attend one or two courses given by persons with great oratorical ability and return to their practices full of enthusiasm and ready to advise their patients about every aspect of health from backache to diarrhoea.

This is not dentistry, it is the dubious practice of medicine, at its most unscientific. It is time that the dental profession spoke out against it. We should warn our colleagues to approach any new method of treatment with great caution and not to use it in practice until it has proven efficacy. In these days of less busy practices the pressure to undertake treatments other than the conventional procedures is building; we should however not fill this time by the practice of quackery.

*Dr. R.I., Brooke,
University of Western Ontario*

CDA supports Canadian Standards Association

The Canadian Dental Association has approved a yearly grant of \$12,000 to the Canadian Standards Association over the next three years.

The CDA's Council on Dental Materials and Devices passed a resolution at its November meeting to support "in principle CDA endorsement of dental products which have been shown to comply with CSA standards subject to mechanisms to be determined in further discussions between CSA and CDA."

The two organizations are still working out terms for endorsement and certification of dental materials which have met the minimum standard requirements of CSA.

CDA's Executive Director, Mr. Hubert Drouin, was recently appointed a member of the CSA Steering Committee on Health Care Technology. The Committee's purpose is to direct the general lines of standards development and act as a second balloting stage on proposed new stand-

ards or revisions to existing ones. The appointment is in addition to that of several members of the CDA Council on Dental Materials and Devices, which makes up the CSA Technical Committee on Dentistry.

Other matters still to be resolved in the working agreement between CDA and CSA include responsibility for laboratory testing errors, establishment of comparative testing procedures between the individual Canadian university dental laboratories, and the procedures for conducting random tests on those materials and devices which have already met initial testing requirements.

"We have to keep the momentum going. It's not going to be easy to work out the mechanics (of the testing program)," Dr. Derek Jones, chairman of the CSA technical committee on dentistry, said.

The program described by Mr. Drouin, as "long overdue", is important to the dental health care profes-

sion in Canada because it will establish minimum standards for all sorts of dental materials and devices used in the marketplace.

Both the CSA and CDA want to develop standards and a certification program along the lines set by the International Standards Organization in order to monitor the manufacture and importation of inferior quality dental materials.

All materials produced for the Canadian consumer must then comply with the CSA standards of performance and safety.

The CSA has published six standards to date, covering dental terminology and definitions, dental burs and cutters, dental mercury, inlay casting wax, casting gold alloys, and tooth designation for dental purposes.

The CDA grant will ensure the CSA will be able to continue to produce more standards and establish the laboratory testing program for these materials.

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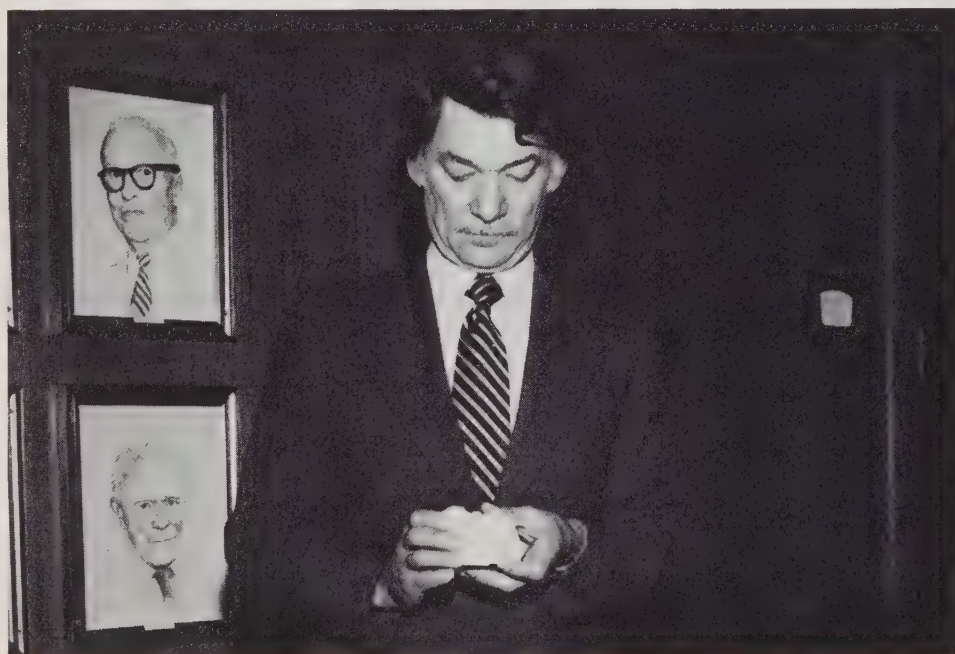
In the News

Student Table Clinic Program



The 11th Canadian Dental Association Student Table Clinic Program was held in conjunction with the 1981 CDA National Convention in Calgary on August 30, 1981. Participating in the program are students from each of Canada's ten Canadian dental faculties. The program is sponsored by Dentsply Canada Limited through a grant to the Canadian Fund for Dental Education.

Dr. Paul Kozier recognized by international group



A Vancouver general family dentist is the first Canadian to receive recognition for orthodontics excellence from the International Association for Orthodontics. Dr. A. Paul Kozier, pictured here showing one of his plaster study models of orthodontically treated teeth which he submitted as part of the reexamination, received the diplomate from the International Board of Orthodontics at a recent IAO meeting in Toronto. Dr. Kozier, a graduate of McGill University in 1953, has been practising dentistry in Vancouver for 28 years and is a member of the B.C. and Canadian Dental Associations.

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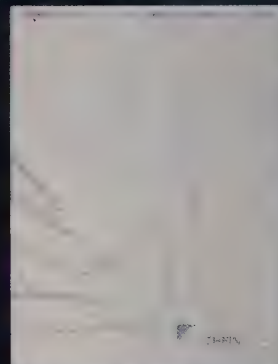


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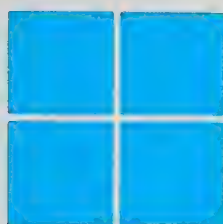
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The Elipar is a lightweight gun-shaped transmitter with a simple, fully flexible, non-breakable five foot electric cord which means it can be manipulated repeatedly without fear of breakage.

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The rest of the Espe system consists of Visio-Dispers — a stiff, non-tacky, non-porous composite material which can be cured in twenty seconds and polished immediately to a life-like lustre.

The last part of the Espe system is Visio-Bond, a single component light cured resin requiring no mixing. Visio-Bond is perfect for clear plastic orthodontic brackets and can be polymerized simultaneously with Visio-Dispers.

The restorative system of the eighties — the Elipar curing light, Visio-Dispers composite material and Visio-Bond light cured resin — from Espe and Ash Temple both know what goes into helping dentists.

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We know what goes into helping dentists

INNOVATIONS

A message to the dental profession:

You can lead a horse to water, but you can't make him drink

That adage isn't about horses — it's about us human beings, isn't it? We're a perverse lot. You can show us what's good for us, even lead us to it, but you can't make us do it. Right? You can lead us to water — reason with us — and we get the point but go our own way, anyway.

The philosopher, Socrates, learned that. He thought if people understood what was reasonable they'd go ahead and do it. Those same people made Socrates drink poison.

Every dentist and hygienist has tried being a teacher, or prophet, of oral hygiene — tried to make patients practise conscientiously — tried to get them to brush their teeth properly. And every dentist and hygienist knows, in his heart of hearts, that all this good instruction hasn't wholly succeeded. Some of your patients won't take the time and care to practise oral hygiene properly, even though they understand it. That gap between understanding and behaviour is known to philosophers as "the Socratic Error." People do it their own way, anyway, even though they know better.



So we at Action Hygiene Products decided to accept human nature for what it is. We noticed that you can show people how to brush, but you can't make some do it — not right, anyway. So instead of trying to buck human nature, we thought, let's go with it. Let's try to make the job easier. Let's adapt the brush, instead of the user.

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Brussels Design Award

The idea first came to two German automotive tool designers who had a friend in periodontology. The friend tried to show them the painstaking methods of slanting a brush against the teeth and moving it toward the biting surfaces. He explained why this effort was necessary to get a standard brush to work in problem crevices and interdental areas. But as tool-makers, the two Germans looked for a practical design solution in the tool itself. And the design solution was a two-headed, slanted-bristle brush — "Action 2."

The design won an award at the Brussels Salon of Inventions in 1976.

Try Action 2 yourself. If you're tired of bucking human nature, recommend Action 2 to your patients. It gets the job done for them.

The concept was rigorously tested by one of the few accurate methods ever established to give comparative results between different styles of brushes. It is reported in *The Journal of Periodontology* (Vol. 38, pp. 526-533). Read it yourself and make up your own mind. As the result of this test and our own experience, we make this claim:

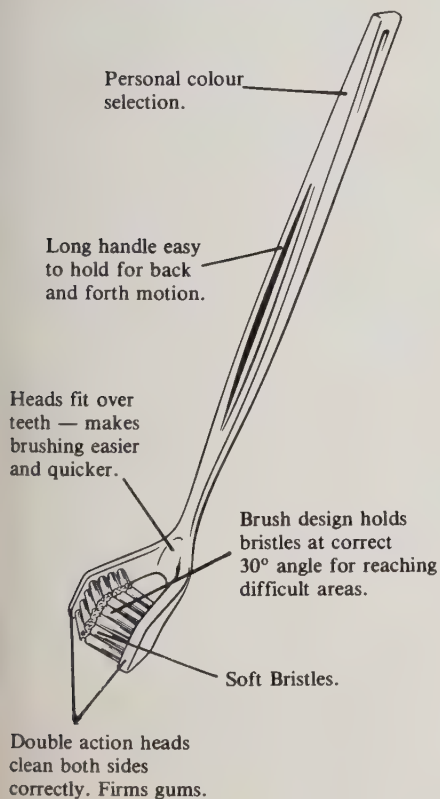
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"Scientific tests, reported in *The Journal of Periodontology* were conducted independently of the manufacturers.

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CDA speaks for Canadian dentists

The Canadian Dental Association is the national organization of the dental profession in Canada.

From its headquarters in the nation's capital, Ottawa, it speaks for dentists across the country — acting on the challenges which are facing the profession today, the primary goal being the provision of high quality, comprehensive dental health care to all Canadians.

OBJECTIVES

The CDA Letters Patent list the following objectives:

- (a) to cultivate and promote the art and science of dentistry, and all its collateral branches, and to protect and maintain the honor and interests of the dental profession;
- (b) to conduct, direct, encourage, support or provide for exhaustive dental and oral research;
- (c) to elevate and sustain the professional character and education of dentists;
- (d) to promote mutual improvement, social intercourse, and goodwill among members of the profession;
- (e) to enlighten and direct public opinion in relation to oral hygiene, dental prophylaxis, oral health and advanced scientific dental services;
- (f) to disseminate knowledge of dentistry and dental discoveries;
- (g) to have cognizance of and safeguard the common interests of the dental profession;
- (h) to publish dental journals, reports and treatises;
- (i) to do all further or other lawful things and acts as are incidental or conducive to the attainment of the above objectives.

MEMBERSHIP AND STRUCTURE

There are approximately 10,000 members of the CDA and eight

classes of membership: corporate (voting), active, affiliate, honorary, life, associate, student and supporting members.

The 10 provincial dental associations and the Canadian Forces Dental Services are corporate members of the Association.

Provincial legislation in Ontario and Quebec prohibits mandatory membership in the Canadian Dental Association. The other provinces require all licensed dentists to be members of the CDA.

More than 70 per cent of Canadian dentists are members of the CDA, while 95 per cent of dental students are members.

The first meeting to organize the Canadian Dental Association was held at McGill University, Montreal, in September, 1902. More than 20 per cent of Canada's dentists attended this meeting, with representation from Halifax to Vancouver — a remarkable feat in those days. In 1942, the national organization was revamped with the decision of the nine provincial licensing bodies to become corporate members. (Newfoundland was to join in 1950.) The corporate members also decided to make annual grants to stabilize the finances of the national body.

A permanent secretary was appointed to direct the activities of the revitalized Association, which was incorporated by an Act of Parliament with the official names, "Canadian Dental Association", "L'Association dentaire canadienne". On July 1, 1972, the Association was awarded letters patent by the the Minister of Consumer and Corporate Affairs.

The policy-making and supreme authoritative body of the Canadian Dental Association is the Board of Governors.

Voting members of the Board are the governors, CDA president,

president-elect and immediate past-president. Each corporate member is represented by one voting member for up to 500 CDA members and one voting member for each additional 500 members. A student representative also sits on the Board as a voting member. Non-voting members are the Board chairman and the CDA executive director.

Currently there are 25 Board members. The senior dental representatives of Health and Welfare Canada and Veterans Affairs are invited as observers.

At present, the Board holds a two-day meeting twice a year. An interim meeting is held in March in Ottawa and the annual meeting takes place prior to the convention, which is held in a different location each year.

The Executive Council meets at least four times a year and consists of the president, president-elect, immediate past-president and six additional members elected by the Board of Governors from its membership. These members should be, if possible, geographically located to fairly represent the country and dental geographies.

The Executive Council prepares the budget, audits accounts, submits a report of its activities to the Board of Governors, reviews reports from councils, committees, specialty sections, corporate members, related associations and individuals and makes recommendations to the Board. The Council also determines meeting dates, appoints officials and supervises and maintains CDA headquarters.

Reports discussed by the Executive Council are directed to the Board of Governors for further discussion and ratification, rejection, amendment or deferment. National policies evolve

from this procedure after in-depth study by the Board.

Much of the planning and program activity of the Canadian Dental Association is carried out by the 24 councils and committees.

There are also independent specialty sections on endodontics, oral pathology, oral radiology, oral and maxillofacial surgery, orthodontics, paedodontics, periodontology, prosthodontics, and public health dentistry.

Affiliated societies of the CDA include the Association of Canadian Faculties of Dentistry, the Canadian Fund for Dental Education, the National Dental Examining Board, the Royal College of Dentists of Canada and the Canadian Dental Services Plans Inc.

SERVICES

More than 80 volunteers from the profession and 22 full-time CDA staff members conduct the affairs of the Association.

A brief summary of the councils and committees and some of the services they provide follows:

Management Committee

The Committee is comprised of the president, the president-elect and the immediate past-president. The president-elect chairs the meetings.

In addition, the council is responsible for many health education pamphlets and career brochures which are continually updated and distributed at the rate of more than a quarter of a million yearly. A dental film series, reviewed by the council, is made available to the public and profession as well.

Members of the profession are kept abreast of current issues through the CDA Journal, CDA Communiques and information letters. CDA Headquarters staff also answer more than 200 inquiries a week from members of the public, the dental profession, the media and the business community.

Council on Insurance and Investment

Members of the board of directors of the Canadian Dental Service Plans

Inc. (CDSPI) are appointed annually to act as the Council on Insurance and Investment.

The CDA offers both a Registered Retirement Savings Plan and Group Insurance to Canadian dentists. The council recommends the kinds of insurance and terms of coverage required through surveys and negotiations with the insurance market to determine costs, terms and conditions of available coverage.

The council reviews insurance contracts, recommends the manner of distribution of surplus and reserve funds, and advises on and reviews association-sponsored pension and retirement savings plans.

The council also recommends a premium collection agency, the terms of contract for premium collection, and reviews its function to determine efficiency and economy.

Council on Nominations

The council is comprised of three members elected by the Board of Governors at its annual meeting. The past-president of CDA acts as chairman. The council prepares a list of all elective offices to be filled, invites and receives in writing nominations for each elective office, rules on the eligibility of the nominees, and makes further nominations to be sure there is at least one eligible nominee for each vacancy.

Council on Student Affairs

The council reports on students' interests and activities. It organizes and conducts the annual Canadian Dental Students' Conference and recommends policies bearing on student members' involvement in national and international dental student affairs.

LIBRARY

The Sydney Wood Bradley Memorial Library, located at CDA headquarters, acts as a resource and information centre for the dental profession. The library houses a limited selection of dental literature and current periodicals, in addition to

up-to-date information on continuing education and reference material of interest to the dental profession on a national basis. The library also acts as a depository of information by collecting relevant data and material of local input from provincial associations on dental issues of national concern.

NATIONAL AND INTERNATIONAL RELATIONS

As well as being affiliated with the national societies mentioned earlier, the CDA also liaises with the Canadian Dental Hygienists' Association and the Canadian Dental Nurses' and Assistants' Association.

On the international scene, the CDA liaises with the American Dental Association (ADA), and is affiliated with the International Standards Organization (ISO), the World Health Organization (WHO), and the Federation Dentaire Internationale (FDI), to ensure a continuing exchange of scientific information and a constant flow of ideas in the dental world community.

All of these inter-related bodies work together with one aim in mind — to provide the best possible dental service in Canada and to serve the public in the best possible way.

The committee is custodian of all monies, securities and deeds belonging to the Association. It presents an annual report to the Executive Council which includes the Auditor's Report for the preceding year and the budget that has been proposed for the succeeding fiscal year. The Executive Council then presents the annual report to the Board of Governors.

Convention Committee

The CDA holds one of the largest professional conventions in Canada. The convention features reports from recognized authorities in major dental fields as well as a large number of clinical presentations, scientific films and health and commercial dental exhibits. Together with the corporate member in the province where the convention is located that year, the

In the News

CDA convention committee organizes both the scientific and social programs.

Membership Committee

The committee operates to enhance membership in the CDA with particular attention to Ontario and Quebec where membership is voluntary. CDA also conducts its own student membership campaign in all provinces except Ontario, where it liaises with the provincial committee.

Product Acceptance Committee

The committee evaluates research carried out by dental manufacturers to determine if the CDA Seal of Recognition should be awarded for dentrifices and mouthwashes which contain effective decay preventive agents, and monitors advertising of these products.

Taxation Committee

Committee members identify areas where federal taxation legislation or regulations are unjust or unfair to the individual dentists and/or the public and recommend necessary action to correct the inequities. Members formulate a plan of action and obtain supportive data for submissions to governments. They also liaise with members of other professional associations.

Editorial Board

This board is responsible for the publication of the Journal of the Canadian Dental Association. The Journal contains a variety of scientific and professional articles, as well as features including book reviews, provincial matters and faculty news, classified advertising, and dental meetings and activities.

Council on Constitution and Bylaws

Members of the council review the bylaws, letters patent and any supplementary letters patent, recommend amendments, and draft or review the text of all proposed amendments.

Council on Dental Materials and Devices

Council members act in an advisory and consultative capacity evaluating materials and devices employed in the practice of dentistry and the main-

tenance of oral health. The council develops standards for materials and devices and encourages a program for testing, evaluation, acceptance and certification. It reviews and comments on advertising and/or demonstration on any non-pharmacological aspects of materials and devices. The council also communicates to the membership information considered of importance and interest.

Council on Education

Members of the council study, develop guidelines and evaluate matters relating to dental education.

The Canadian Dental Association is the official accreditation body for educational institutions. It investigates undergraduate, graduate and post-graduate specialty programs in the dental faculties at Canadian universities, dental assisting programs at community colleges and dental hygiene programs at both universities and community colleges, followed by periodic reviews.

In addition, the council is responsible for the Dental Aptitude Test (DAT) which is a twice-yearly evaluation for pre-dental students to test academic abilities and manual skills. More than 1,800 students participate annually in DAT.

The council also assists corporate members or provincial licensing bodies, or both, with dental education. As well, members are responsible for evaluating the role of the CDA in continuing education. Studies, projects and programs are undertaken as deemed necessary in order to fulfill this function.

Much of the work of the above council is undertaken by four committees divided into a) Undergraduate, Graduate/Postgraduate; b) Auxiliaries; c) Dental Admissions Test; and d) Continuing Education.

Council on Ethics

Council members recommend ethical standards and promote ethical principles. The CDA has a Code of Ethics which is regularly reviewed to encourage the highest possible standards of dental practice and to protect the public from improper and unethi-

cal practices and treatments. The Code serves as a guide to provincial dental organizations, encouraging uniformity in practice ethics across Canada.

Council on Health Care

This council is broken down into three committees and several subcommittees:

- (a) Committee on Public Health and Preventive Dentistry — subcommittees deal with fluoridation, nutrition and radiation protection.
- (b) Committee on Dental Programs and Services — subcommittees deal with several subjects including dentistry for the disabled, geriatric care, prepayment programs, publicly funded dental plans, uniform system of coding and list of services, and alternative delivery systems.
- (c) Committee on Dental Auxiliaries

Members of the Council on Health Care determine and evaluate methods of preventing and treating dental disease and abnormalities through an examination of dental health care delivery systems, including public health programs. They also report on the economics of various methods, study the need for and development of auxiliary dental personnel, and develop and identify resource documents to be made available to corporate members on request.

Council on Hospital Services

The council assists in maintaining a high standard of dental services in Canadian hospitals. Members accredit hospital dental services and define roles and responsibilities which meet the requirements of the corporate members. The council also examines and reports on the provincial acts governing dental services in hospitals.

Council on Information Services

Council members develop guidelines for methods and programs to disseminate education information to the profession and to the public through all media. One instrument is the subcommittee on National Dental Health Month which highlights the importance of good dental hygiene.

STRUCTURE OF THE CANADIAN DENTAL ASSOCIATION

BOARD OF GOVERNORS

MANAGEMENT COMMITTEE

EXECUTIVE COUNCIL

EXECUTIVE COMMITTEES

Convention
Membership
Product Acceptance
Taxation
Editorial Board

AFFILIATED SOCIETIES

Association of Canadian Faculties of Dentistry
Canadian Dental Hygienists' Association
Canadian Dental Nurses' and Assistants' Association
Canadian Dental Service Plans Incorporated
Canadian Fund for Dental Education
National Dental Examining Board
Royal College of Dentists of Canada

GROUP STATUS

Canadian Society of Dentistry for Children
Canadian Academy of Prosthodontists
Canadian Academy of Restorative Dentistry

SPECIALTY SECTIONS

Endodontics
Oral & Maxillofacial Surgery
Oral Pathology
Oral Radiology
Orthodontics
Paedodontics
Periodontics
Prosthodontics
Public Health

COUNCILS

Constitution and Bylaws
Dental Materials and Devices
Education a) Undergraduate, Graduate/Postgraduate
b) Auxiliaries
c) Dental Admissions Test
d) Continuing Education
Ethics
Health Care a) Committee on Public Health and Preventive Dentistry
b) Committee on Dental Programs and Services
c) Committee on Dental Auxiliaries
Hospital Services
Information Services
Insurance and Investment (CDSPI)
Nominations

EXECUTIVE DIRECTOR

assistant to the Executive Director

Business Manager

secretary

Director of Accreditation

secretary

Director of Education

secretary

Director of Communications

secretary

editor

advertising manager

librarian

information officer/
writer

fluoridation officer

secretary

clerk-
typist

junior
accounting
clerk

senior
accounting
clerk

receptionist

records
clerk

building
supervisor
shipping
receiving

security/
handyman

Librarian appointed



Executive Director Hubert Drouin is pleased to announce the appointment of Ms. Margo Beres as CDA's librarian.

Dentists, researchers, CDA's affiliates and members of the health professions can now tap into the updated resource centre at the Canadian Dental Association headquarters in Ottawa.

The present collection in the CDA library has been inventoried, and unnecessary material will be weeded out shortly. A catalogue of library contents will be published in the near future and additions to the collection will be announced in the Journal.

The aim of the library, said Ms. Margo Beres, who joined CDA as its librarian in April 1981, is a current but limited working collection of dental materials, containing core and classic books, periodicals and continuing education information. "Government documents, statistics and corporate publications which would otherwise be difficult to attain for a library outside of Ottawa are going to be in the library" and issues concerning the dental practitioner will be emphasized.

In addition to the current collection, the library will be offering a computerized literature search through

MEDLINE, a data base produced by the U.S. National Library of Medicine. Access to this base will provide users with bibliographic references to more than 475 dental journals around the world.

"The new computer service will help us keep abreast of all current dental publications in the world. It's a great research tool, quick and efficient, for all the library's users," Ms. Beres said.

If the required information or publications are not housed by the library, Ms. Beres will inform users where they can find what they need. Inter-library loans will have to be limited to xerox copies because of the delays inherent in a national mailing service of library materials.

Ms. Beres, who has worked at the Canadian National Railways Library the Montreal General Hospital Library and the Canadian Institute of Historical Micro reproductions in Ottawa, said the library also offers traditional reference service and research assistance, as well as book and periodical lending across Canada.

Ms. Beres is from Montreal and holds Honours B.A. and M.L.S. degrees from McGill University.

Hepatitis B clinic

The Manitoba government has granted \$88,845 to the Faculty of Dentistry at the University of Manitoba for a Hepatitis B clinic.

The grant will cover costs of setting up the clinic to provide dental services to persons at risk from serum hepatitis (Hepatitis B).

The clinic will be located at the faculty and will be available to persons who are carriers of Hepatitis B and have difficulty in obtaining regular dental treatment. Fees will remain standard, according to the government schedule for social allowance recipients.

Health Minister Bud Sherman said the clinic should be capable of hand-

ling emergency cases by July 27 and be in full operation by early August.

The clinic was developed by the health department, in consultation with the faculty and the Manitoba Dental Association.

The facility will be used both for treatment and teaching purposes.

RCDC requirements

The Royal College of Dentists of Canada has announced its current standards for eligibility for membership.

Membership without examination is offered in three categories.

The first is for all specialists who have passed the Part I examination (as of June, 1981, the membership examination) for Fellowship.

The deadline for application is March 15, 1982 for the May 8, 1982 convocation.

The second category is for all specialists who have held provincial certification for a minimum period of eight years as of January 1, 1981. The deadlines are as above.

The third category includes all specialists who hold the National Dental Examining Board of Canada/Royal College of Dentists of Canada specialty portability certificate. Application deadlines as above.

Course Offered

A course will be offered on "Conscience Sedation", Faculty of Dentistry, University of Alberta, Edmonton, Alberta, May 22-26, 1982. Contact Mrs. Florence Ingham, Division of Continuing Education, Faculty of Dentistry, University of Alberta, Edmonton, Alta. T6G 2N8. Phone: (403) 432-5023.

Canadian Participation in Dental International Standards Meeting

by Dr. Derek W. Jones

Chairman Canadian Advisory Committee ISO/TC 106;
Chairman C.S.A. Technical Committee on Dentistry;
Secretariat ISO/TC 106 WG1; and
Professor and Head of Dental Biomaterials Science,
Faculty of Dentistry, Dalhousie University.



The Canadian delegation at the ISO/TC 106 meeting in Pretoria, South Africa. Left to right Drs. Pierre Desautels, Peter Williams, Ralph Barolet, Len Johnson, Derek Jones (CAC Chairman), and Dan Gau.

The Canadian Advisory Committee to ISO/TC 106 Dentistry is continuing to work closely with the Canadian Dental Association through its Council on Dental Materials and Devices. This co-operation is extremely important for the development of a compliance program for dental materials based upon Canadian Standards.

The CSA and CAC Committees are actively participating in the development of ISO standards. All of the working groups of ISO/TC 106 on Dentistry have Canadian representation.

The Canadian delegation headed by Dr. Derek W. Jones participated in the meeting of ISO/TC 106 held this year in Pretoria, South Africa during September, 1981. (See photograph.) Some 80 delegates from 15 different countries took part in the meeting. Six ISO/TC 106 working groups and 22 task groups met during the period 14-17th September, the final plenary session of the Technical Committee was held on the 18th of September. Dr. John McLean retired as Chairman of the ISO/TC 106 after providing his experience and guid-

ance for the past 14 years. Professor P. Laplaud (France) was elected as the new Chairman and will take over his duties at next year's meeting in Austria in 1982.

Canada's participation at the international level is essential in order to integrate the activities of the CSA Committee with those of the ISO/TC 106. Canada has been playing a leading role in the various ISO Committees for several years.

The Canadian delegation worked very hard at this year's meeting and made significant contributions. Drs. Jones and Gau (as Secretary and Chairman) were heavily involved in the running of Working Group 1 (Filling Materials) which had six task groups meeting. Progress was made in the development of draft documents for standards dealing with 1) Endodontic Materials and paper points, 2) Pit and Fissure Sealants, 3) Dental Mercury and Amalgamation devices, 4) Glass Ionomer Cements, 5) Resin Based Dental Filling Materials, 6) Cement Test Methods. A document 'A Guide to Standards Writing' produced by Dr. Derek Jones was adopted as a reference document for Working Group 1 ac-

tivities. Progress was made on a new work item dealing with amalgamation devices. Dr. Ralph Barolet worked very hard and brought credit to the Canadian delegation by accepting at very short notice the position of acting convenor of this task group as well as the task group dealing with mercury.

Working Group 2 (Prosthetic materials) had nine task groups meeting dealing with the development of draft standards for 1) Porcelain fused to Metal, 2) Base Metal Alloys, 3) Investments for Gold Alloys, 4) Colour Stability, 5) Dental Gold Alloys, 6) Soft Lining Materials for Dentures, 7) Denture Base Resin (revision), 8) Corrosion, 9) Gold Based Solders. Dr. Len Johnson was Convenor of Task Group 10 Soft Lining Materials for Dentures. Considerable progress was made by this group which was meeting for only the second time. Dr. Dan Gau was involved as an expert with WG 1/TG 9 Resin Filling Materials, Dr. Pierre Desautels was a most valuable member of Working Group 3 dealing with Terminology providing an ideal liaison between French and English translations. Dr.

In the News

Peter Williams contributed as an expert to the deliberations of Working Group 7 Tooth Brush Abrasion characteristics and stiffness as well as acting as the Canadian delegate to Working Group 4 on Instruments. Working Group 4 on instruments is producing documents covering the dimensions of rotary cutting instruments, bur strength and performance, classification and designation of instruments, root canal instruments, hand pieces — coupling dimensions. Dr. Derek Jones was involved as an expert in the Task Groups of WG 1 and

WG 2 involving Ceramics, Investment Materials, Soft Lining Materials for Dentures and Cements.

Working Group 6 discussed documents on Lighting Dental Patients Chair, the Dental Unit, Amalgamators and the Dental Operators Stool. Dr. Ralph Barolet was an expert member attending these meetings.

The organization of the meeting by the South African Bureau of Standards was excellent. The meetings of the various working groups and task groups were held in the office of SABS who supplied translation, typ-

ing and duplication services. The ISO meeting was followed by a three day scientific meeting, the "International Congress of Biomaterials in Stomatology". This meeting was jointly sponsored by the South African Bureau of Standards, Dental Association of South Africa and the Faculty of Dentistry, University of Pretoria. Several social activities were organized to coincide with the two meetings, the hospitality was most impressive. Every effort was made to make the visit to South Africa as pleasant as possible.

DENTAL HEALTH BUTTONS



The time to order dental health buttons is upon us once again. Orders yours now to promote Dental Health Month, April 1982 and use as reminders of good dental health all year round.

NOTE: Order in lots of 100 only. Order early to ensure delivery in time for your Dental Health Week.

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L'Association Canadienne des Hygienistes Dentaires



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FRENCH

Remittance must accompany order, payable to CANADIAN DENTAL HYGIENISTS' ASSOCIATION.



Spouses' chairman Germaine Headley presented Mrs. Donald Hunt of Kaslo, B.C. with the CDA convention pre-registration prize — a trip to Las Vegas. The Ladies Committee provided the prize.

Plan to attend the CDA/ODA joint convention May 9-12

Old City Hall, Toronto



Toronto is the setting for this joint convention. The clinical program covers a wide range of topics and the social program opens with the Sunday Evening Buffet and Dancing — a good opportunity to meet your friends.

On Monday evening, there will be a Dinner-theatre featuring Second City and on Tuesday, the ever-popular Fun Nite and Dancing.

The Ladies have arranged an interesting program for dental wives, including a fur fashion show and luncheon at the top of the CN Tower.

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"Epilepsy and the Oral Manifestations of Phenytoin Therapy"

Thomas M. Hassell and Six Contributors

*Karger, New York,
U.S. \$89.25,
205 pp.*

If, after all this time getting the practice in shape, you now owe yourself some study time, consider a day off with Hassell's new book on epilepsy and Dilantin. It is 200 pages of honest scholarship, well detailed but opinionated enough to be both readable and useful. The references are voluminous but it is not just a file card review of the literature. It does come to conclusions, even when that means confessing ignorance.

Epilepsy is a useful, practical place from which one can branch into all sorts of other areas of study — into pharmacology and neurology, into morphology, morphogenesis and histology, into dentistry for the handicapped, into the periodontal diseases, and into head-scratching speculations about why Dilantin should so preferentially affect tissues of the lower face. As a subject in itself, epilepsy repays study if only so that one can understand the condition and come to see why it can be such a burden to those patients who have it.

The book is a monograph, not a blockbuster text. There are no padding chapters — unless you are Philistine enough to object to a chapter on "Historical Perspectives". Actually, that first chapter is both helpful and amusing and

it puts some of society's attitudes into context. One can better understand why people with epilepsy are so secretive about the condition, why, even now, a seizure can occasion so much disgust and fear in those who see it.

People with epilepsy are long-term users of drugs taken to control their seizures. An amazing number of these patients (or their parents) are convinced that they know better than their physicians when it comes to adjusting the dose. Lots of them suspect that the doctor is prescribing the wrong drug. It is well that these anticonvulsants have a good margin of safety. The chapter on chemotherapy is clear about what options are available to the prescriber. This chapter also shows that the therapy of epilepsy has changed a lot in the past few years. Since many physicians in general practice seem (it is implied) to be less than up to date, it is possible that the anarchists among their patients may have a point.

Phenytoin is the central anti-convulsant on the physician's list. It is the drug of first choice for focal and major generalized seizures and it is the one of most dental interest. It will be in use for some time to come. Phenytoin has usually been called Dilantin in the same way that all facial tissues are called Kleenex. In North America the generic name was diphenylhydantoin, or DPH, until recently. Now we are in line with B.P. usage and it is phenytoin.

The book has five chapters on phenytoin — its chemistry and metabolism, its pharmacology, its side effects, its teratologic effects and its effect on gingival overgrowth. Hassell has six other contributors in these chapters and, except for Hassell's own splendid 100 pages on gingival overgrowth that end the book, each chapter is

a short, concentrated, adequate treatment of what is for us mainly background information. These little chapters are, however, well laced with references and the reader can easily delve deeper.

The gingival overgrowth chapter is more complete than any you will find elsewhere. What you learn in school is out of date and this will set you straight.

There is a real place in dentistry for monographs on a variety of subjects and, even more, there is a need for good ones. This one is very good indeed and it nicely presents the biologic basis for epilepsy and seizure control. True, it tells you nothing much about the personal consequences of the condition in the lives of the people who are epileptic, nor about the management of seizure-prone patients in your office, nor about hiring people with epilepsy to work for you — but it didn't intend to and there are, after all, simple ways to find out about these things — your local epilepsy association, for instance.

This book was reviewed by Dr. Hugh Mackay, University of Toronto

Fight the lung cripplers

Emphysema, Asthma,
Tuberculosis, Chronic
Bronchitis, Air Pollution

Use
Christmas
Seals



Publications

An Atlas of Pedodontics

*Davis, T.M., Law, D.B.,
and Lewis, T.M.*

*2nd ed.,
W.B. Saunders Co.,
Philadelphia, 1981.*

This atlas is intended to give the practising dentist a photographic presentation of clinical pedodontics and at the same time provide narrative descriptions that are characterized by clarity and brevity. The book fulfils this objective. It identifies many conditions that are found in child dental patients and reviews procedures in a step-by-step manner that can be helpful to the clinician.

In an atlas, the illustrations are critical to its success. Many of the photographs and illustrations were either taken by or under the direction of Mr. Clifford L. Freehe and they are of excellent technical quality. The photographs provide outstanding pictorial descriptions of numerous conditions.

The drawings are clear, easy to follow and, in some cases, describe step-by-step clinical pedodontic techniques.

This second edition offers something different from the original publication. Some of the chapters have been condensed and updated. The deletions, such as in Chapter One, improve the book and the direct bonding techniques made Chapter 17 more current. The colour plates added to Chapter Three are exceptional and should aid the dentist in identifying anomalies of colour.

The second edition also features four additional chapters which are primarily the result of invited contributors. These contributions add both strengths and weakness to the book. The individual chapters are well written and provide useful information. However, coordination with the pre-existing atlas material is lacking. The chapter on space maintenance precedes the orthodontic diagnosis chapter, and some of the material overlaps. Chapter Eleven deals with exodontia and precedes a chapter on pediatric

oral surgery. These two chapters might have been integrated.

Management of the child patient, Chapter 19, and the succeeding sedation chapter also could have been combined. As they are written, they do not lend themselves to an atlas presentation since they do not offer a good pictorial representation of the subject. Similarly, some of the handicapping conditions, such as deafness or diabetes mellitus which rely on narrative descriptions, could have been omitted. In this regard, the book reaches beyond its stated objective.

Despite these editorial shortcomings, the book is recommended as a worthwhile reference source for pedodontics in general practice. It can be a valuable aid to assist the practitioner in identifying unusual conditions that present in the dental office.

This review was prepared by Gerald Z. Wright D.D.S., M.S.D., F.R.C.D. (C), Professor and Chairman, Division of Paedodontics, Dept. of Paediatric & Community Dentistry, University of Western Ontario.

Introduction to Dental Statistics

R. Weinberg and S.L. Cheuk

*Noyes Medical Publications,
Park Ridge, New Jersey; 1980*

As its title suggests, this book deals with elementary statistics and was written for dental students, clinicians, and researchers. Two aspects of this text make it immediately attractive: the reader

requires no previous exposure to statistics, calculus or algebra and the examples used throughout the book are related to dentistry.

With any introduction to a subject area, it is difficult to restrict the material such that the novice reader is adequately informed yet not overwhelmed but the authors of this book have managed to achieve a manageable balance which allows the reader to get a feel for statistical concepts, yet not become mired in technical jargon.

The introduction handily includes a glossary of statistical terms and a description of the formulae and symbols for the arithmetic mean and variance but no explanation of what the mean and variance represent. Following a concise but clear chapter on describing a sample (which introduces the commonly employed measures of central tendency and dispersion but deals more thoroughly with how to display data in tables and graphs), the text ventures into the concepts of the

normal curve, estimating population means from sample means and hypothesis testing. The reader who is unfamiliar with statistical terminology should be able to readily grasp what is presented. The chapter on hypothesis testing includes the steps involved in the process and the interpretation of the results, which is extremely helpful.

Several statistical tests are introduced in this publication which include the analysis of variance, multiple comparisons among means, correlation, chi square and other non-parametric tests. The authors do an admirable job of explaining when to use these statistical tests and the steps involved. An example is also used in each case which serves to make the procedures more understandable.

The book concludes with a chapter on dental epidemiology which provides many definitions and explains and gives examples of cross-sectional, retrospective and prospective study designs including one method of statistical analysis associated with each.

If after reading through this publication, one returns to the introduction to review the stated objectives, it becomes readily apparent that this text may fall short of what it is designed to do. With the aid of the book, the dental student or dental practitioner should be able to understand and master basic statistics needed to follow an assigned paper, comprehend a lecture evaluate clinical procedures or materials. However, a novice researcher might encounter difficulty designing and evaluating a study based solely on the information in this book. There is essentially no discussion of the effect of sampling error, sample size estimation, study cause and effect, bias, dental indices, reliability and validity, which are the

basic building blocks of a properly designed research study.

In summary, this book does serve quite adequately as an introduction to dental statistics and it is well written, terse and uses examples effectively. If the reader is contemplating embarking on a

scientific study however, he is advised to consult other texts on the subject as well as a dental epidemiologist or statistician in order to avoid pitfalls not identified in this book.

Reviewed by Dr. David W. Banting, University of Western Ontario.

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Bob Levoy, Speaker

As the Director of Professional Practice Consultants in Great Neck, New York, Bob Levoy is widely known for his unique ability to facilitate growth in others.

He holds three college degrees in business and professional fields and is the author of two books: "The \$100,000 Practice and How to Build It" and "The Successful Professional Practice"

He has also written over 300 articles including many for *Dental Economics* for which he is a columnist.

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Time: 8:45 a.m.

Fee: \$225 — Dentist and one staff member

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Topics

- Where The New Breed of Patients Is Coming From: What They Want, Need and Expect from a Dental Practice
- How a "Business as Usual" Attitude Can Undermine Your Practice in These Competitive Times
- The **Performance Audit**: The Key to Seeing Yourself — As Others Do
- The **Boredom Factor** — and What To Do
- Creative, Low Cost Ways to Market Your Practice — **Without Advertising**
- How to Cope with **Low-Fee Competition**
- How to Make **Staff Meetings** Pay Big Dividends
- New Ways to **Reach & Teach** Your Patients
- Dozens of L.T.T.W. (Little Things That Work) — To Improve Patient Rapport, Compliance, Collections & Recalls
- The Newest Findings on Why Patients are "Switching" Dentists

You Owe it to YOURSELF to Support the Canadian Dental Association

The Canadian Dental Association is a national forum for debate, discussion and ultimate resolution of the problems facing the profession in association with the provinces.

It is a composite of its individual parts:

Provincial Associations and Licensing bodies

general practitioners

specialty groups

educators

armed forces

students

affiliate Societies

Just as the profession owes it to the public to practice preventive dentistry to stave off extensive restorative procedures — so too, do you owe it to yourself to support organized dentistry to protect your interests and your profession.

To be an active member of the Canadian Dental Association you must be a member of your provincial association. Your active membership assures your province of fair numerical representation on the CDA Board of Governors to project your views at the national level.

Support the
National Team
**THE CANADIAN
DENTAL ASSOCIATION**

C'est agir dans VOTRE intérêt que d'appuyer l'Association dentaire canadienne

L'Association dentaire canadienne offre à la profession un point de convergence et une tribune dans l'examen de ses problèmes et la recherche de solutions de concert avec les provinces.

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- les associations provinciales et les organismes de réglementation;
- les dentistes de pratique générale;
- les spécialistes;
- les professeurs;
- les praticiens des forces armées;
- les étudiants;
- les sociétés affiliées.

Tout comme la profession se doit, dans l'intérêt du public, de pratiquer une médecine dentaire préventive et de lui épargner ainsi des restaurations coûteuses, ainsi devez-vous, dans votre propre intérêt et celui de la profession, appuyer votre organisation.

Pour faire partie de l'ADC, vous devez être membre de votre association provinciale. Votre adhésion permettra à votre province d'être représentée équitablement au Bureau des gouverneurs de l'ADC et de mieux faire valoir ses vues à l'échelle nationale.

Appuyez l'équipe
nationale
**L'ASSOCIATION
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Subvention de trois ans à l'Acnor

L'Association dentaire canadienne a approuvé l'octroi, au cours des trois prochaines années, d'une subvention annuelle de 12 000 \$ à l'Association canadienne de normalisation.

Le conseil des matériaux et appareils dentaires a en effet adopté, à sa réunion du mois de novembre, une résolution acceptant «en principe que l'ADC recommande les produits dentaires qui répondent aux normes de l'Acnor, selon des modalités qui seront établies par les deux organismes».

Ces modalités, qui permettront de certifier que les matériaux dentaires répondent aux normes minimales de l'Acnor et d'en recommander l'utilisation, font toujours l'objet de discussions.

Celles-ci portent notamment sur le partage des responsabilités en ce qui a trait aux erreurs qui peuvent survenir au cours des tests en laboratoire, à l'établissement de méthodes comparatives de vérification en laboratoire dans les universités canadiennes, ainsi

qu'au choix et au test des échantillons des matériaux et appareils qui ont déjà satisfait aux premières exigences.

«Il nous faut maintenir l'élan de la discussion, de dire le Dr Derek Jones, président du comité technique de l'Acnor. Ce ne sera pas facile de mettre au point les mécanismes nécessaires.»

M. Hubert Drouin, directeur général de l'ADC, note que le programme se fait attendre «depuis fort longtemps» et en souligne toute l'importance pour la profession dentaire canadienne, puisqu'il permettra d'établir des normes minimales pour tous les genres de matériaux et d'appareils dentaires offerts sur le marché.

L'Acnor et l'ADC veulent mettre au point des normes et un programme de certification qui seront compatibles avec ceux de l'Organisation internationale de normalisation (ISO), afin de prévenir la fabrication et l'importation de matériaux dentaires de qualité inférieure.

Ceci permettra de s'assurer que tous les produits offerts aux consommateurs canadiens répondent aux normes de rendement et de sécurité de l'Acnor.

Celle-ci a déjà publié six normes jusqu'ici touchant la terminologie dentaire et les définitions, les fraises et les forets, le mercure, les cires à empreintes, les alliages en or ainsi que la désignation des dents aux fins de la médecine dentaire.

L'octroi permettra à l'Acnor de poursuivre l'établissement des normes et de mettre au point le programme de tests en laboratoire.

Candidatures au Collège des dentistes

Le Collège royal des dentistes du Canada a fait savoir ses conditions d'admission pour la prochaine convocation qui aura lieu le 8 mai 1982.

Il invite les candidatures, sans autre examen, des trois groupes suivants:

premièrement, les spécialistes qui ont passé, en date du mois de juin 1981, la première partie de l'examen d'admission au fellowship;

deuxièmement, les spécialistes qui, au 1^{er} janvier 1981, détenaient un certificat de leur province depuis au moins huit ans;

troisièmement, les spécialistes qui détiennent le certificat du Bureau national d'examen des dentistes du Canada/Collège royal des dentistes du Canada.

Pour les trois groupes, les personnes intéressées doivent poser leur candidature avant le 15 mars 1982.



À VENDRE ÉTAGÈRES POUR BROCHURES

Pour exposer vos brochures de l'ADC, pourquoi ne vous procurez-vous pas une étagère conçue spécialement à cette intention? Pour la modique somme de \$17.95, (la taxe et les frais d'expédition sont inclus) l'ADC vous fera parvenir une étagère comprenant trois tablettes. Veuillez adresser votre commande à l'Association dentaire canadienne, Service des Communications, 1815, promenade Alta Vista, Ottawa, Ontario, K1G 3Y6.

L'Association dentaire canadienne

L'Association dentaire canadienne regroupe en un organisme national les membres de la profession dentaire du Canada.

De son siège social situé dans la capitale nationale, Ottawa, elle est le porte-parole des dentistes du pays et intervient dans les défis que la profession doit relever, son but premier étant la prestation à tous les citoyens du Canada de soins dentaires complets et de qualité supérieure.

LES OBJECTIFS

Les lettres patentes de l'ADC établissent ainsi ses objectifs:

- a) cultiver l'art et la science de la médecine dentaire et de toutes les disciplines subsidiaires, en promouvoir l'avancement, ainsi que défendre l'honneur et servir les intérêts de la profession dentaire;
- b) mener, diriger, encourager, soutenir ou fournir des recherches approfondies dans le domaine dentaire et buccal;
- c) rehausser et soutenir le professionnalisme et la formation du dentiste;
- d) favoriser le perfectionnement mutuel, les relations sociales et la bonne volonté chez les membres de la profession;
- e) éclairer et orienter l'opinion publique en ce qui a trait à l'hygiène et à la santé buccales, à la prophylaxie dentaire et à l'avancement scientifique des services dentaires;
- f) faire connaître la dentisterie et les découvertes dans le domaine;
- g) connaître et défendre les intérêts communs de la profession dentaire;
- h) éditer un périodique et publier des rapports et des traités sur la dentisterie;
- i) poser tout autre geste légitime, afférent ou favorable à la poursuite des objectifs énoncés ci-dessus.

L'ADHÉSION ET L'ORGANISATION

L'ADC compte environ 10 000 adhérents qui sont répartis en huit catégories: les membres corporatifs (ayant droit de vote), les membres actifs, les membres affiliés, les membres honoraires, les membres à vie, les membres associés, les membres étudiants et les membres auxiliaires.

Les 10 associations dentaires provinciales et le Service dentaire des Forces canadiennes font partie de l'association à titre de membres corporatifs.

Alors que les lois des provinces de l'Ontario et du Québec interdisent l'adhésion obligatoire, les autres provinces exigent que tous les dentistes autorisés à pratiquer adhèrent à l'Association dentaire canadienne.

Plus de 70 p. cent des dentistes canadiens et 95 p. cent des étudiants en médecine dentaire font partie de l'ADC.

L'Association dentaire canadienne a été fondée au mois de septembre 1902, lors d'une assemblée qui a réuni, à l'Université McGill, à Montréal, plus de 20 p. cent des dentistes du pays. Toutes les régions du pays y étaient représentées, de Halifax à Vancouver — un exploit pour l'époque. En 1942, l'organisme national a connu un nouvel élan lorsque les neuf organismes provinciaux émetteurs de permis ont décidé de s'y joindre à titre de membres corporatifs (Terre-Neuve devait le faire en 1950), et de lui verser des subventions annuelles pour stabiliser son financement.

L'Association, ainsi revigorée, a établi un secrétariat permanent pour mener ses activités. Elle a été constituée comme telle par une loi du Parlement sous les noms officiels de *Canadian Dental Association* et "L'Association dentaire canadienne". Elle a reçu ses lettres patentes du

ministre de la Consommation et des Corporations, le 1^{er} juillet 1972.

L'organisme directeur de l'Association dentaire canadienne, qui a toute autorité, est le Bureau des gouverneurs.

On droit de vote à ce Bureau: les gouverneurs, le président de l'Association, le président élu et le président sortant, de même les représentants des membres corporatifs (à savoir: un délégué chacun, représentant jusqu'à 500 membres de l'ADC, puis un représentant par tranche additionnelle de 500 membres), ainsi qu'un représentant des étudiants. N'ont pas droit de vote, le président du Bureau et le directeur général de l'ADC.

Le Bureau compte actuellement 25 membres. Y sont invités à titre d'observateurs, des hauts fonctionnaires des services dentaires de Santé et Bien-être Canada et des Affaires des anciens combattants.

Pour le moment, le Bureau tient chaque année deux réunions de deux jours chacune: une réunion provisoire qui a lieu au mois de mars à Ottawa et la réunion annuelle qui précède le congrès et a lieu dans une localité différente chaque année.

Le Conseil exécutif, qui se réunit au moins quatre fois par année, comprend: le président, le président élu, le président sortant et six autres conseillers, que les membres du Bureau des gouverneurs élisent entre eux, compte tenu, dans la mesure du possible, de la représentation géographique sur le plan du pays comme de la profession.

Le Conseil exécutif prépare le budget, vérifie les comptes, fait rapport de ses activités au Bureau des gouverneurs, auquel il présente aussi ses recommandations à partir des représentations que lui font les autres conseils, les comités, les sections spécialisées, les membres corporatifs, les autres associations et les personnes intéressées. Le Conseil fixe également

Les Actualités

la date des assemblées ou réunions, nomme les cadres supérieurs, surveille les activités du siège social et survient à ses besoins.

Les rapports examinés par le Conseil exécutif sont acheminés au Bureau des gouverneurs qui, après plus amples discussions, les ratifie, les rejette, les modifie ou en remet l'étude à plus tard. Ainsi s'élaborent les énoncés de principe sur les questions d'envergure nationale que le Bureau examine en profondeur.

La planification et la mise au point des activités de l'Association dentaire canadienne est confiée à 24 conseils et comités.

Des sections spécialisées s'occupent des questions concernant l'endodontie, la pathologie buccale, la radiologie buccale, la chirurgie buccale et maxillo-faciale, l'orthodontie, la pédiodontie, la périodontie, la prosthodontie et la dentisterie dans les services publics.

Les sociétés affiliées à l'ADC comprennent, entre autres; l'Association canadienne des facultés de médecine dentaire, le Fonds canadien pour l'enseignement dentaire, le Bureau national d'examen en médecine dentaire, le Collège royal des dentistes du Canada et le *Canadian Dental Services Plans Inc.*

LES SERVICES

Plus de 80 professionnels se joignent volontairement aux 22 employés permanents pour mener les activités de l'Association.

Voici un aperçu des conseils et comités ainsi que de leurs activités.

Le comité de gestion:

Il est formé du président, du président sortant et du président élu qui en préside les réunions.

C'est ce comité qui a la garde des argents, des valeurs et des titres de

l'Association. Il présente au Conseil exécutif un rapport annuel qui comprend le rapport du vérificateur pour l'année écoulée et le budget proposé pour le nouvel exercice financier. L'exécutif soumet ensuite ce rapport à l'examen du Bureau des gouverneurs.

Le comité du congrès:

Le congrès de l'ADC est l'une des plus importantes manifestations professionnelles du genre au Canada. Il comprend notamment la présentation d'exposés par des autorités reconnues dans les grands domaines de la médecine dentaire, de même qu'un grand nombre de présentations cliniques et de films scientifiques, et une importante exposition de produits dentaires et hygiéniques. Le comité du congrès en organise les activités scientifiques et sociales, avec la participation du membre corporatif de la province où se tient le congrès.

Le comité du recrutement:

Ce comité veille à accroître les rangs de l'Association, notamment en Ontario et au Québec où l'adhésion est libre. L'ADC mène aussi sa propre campagne de recrutement auprès des étudiants de toutes les provinces, sauf en Ontario où elle entretient des rapports avec le comité provincial.

Le comité d'approbation des produits:

Ce comité apprécie la valeur de la recherche menée par les fabricants de produits dentaires et voit s'il peut apposer le sceau d'approbation de l'ADC aux dentifrices et aux rince-bouche qui contiennent suffisamment d'agents de prévention de la carie dentaire; il en surveille également la publicité.

Le comité des questions fiscales:

Il cerne les points de la fiscalité sur lesquels la législation ou la réglementation fédérales sont injustes ou

inéquitables pour le dentiste ou le public et recommande les corrections à y apporter. Il élabore, en ce sens, un plan d'intervention et obtient l'information nécessaire pour présenter ses recommandations au gouvernement. Il entretient également des rapports avec les autres associations professionnelles.

Le comité de rédaction:

Ce comité est chargé d'éditer le Journal de l'Association dentaire canadienne qui présente une variété d'articles scientifiques et professionnels, de même que diverses informations sur les nouvelles parutions, les questions provinciales, les facultés de médecine dentaire, les activités, congrès et conférences intéressant la profession, ainsi qu'une section des petites annonces.

Le conseil des statuts et règlements:

Il revoit les règlements, les lettres patentes ou toutes lettres patentes supplémentaires, recommande les modifications à y apporter, rédige ou révisé le libellé de toutes les modifications qui sont proposées.

Le conseil des matériaux et appareils dentaires:

Ce conseil évalue, à titre consultatif, les matériaux et les appareils dont on se sert dans la pratique de la médecine dentaire et la conservation de la santé buccale. Il élabore des normes et facilite la mise en oeuvre d'un programme visant à vérifier, évaluer et approuver les matériaux et appareils, de même qu'il en examine la publicité ou la démonstration autre que pharmacologique, et fait les observations qu'il juge à propos. Le conseil transmet également aux membres toute information qu'il juge importante ou intéressante.

Le conseil de l'éducation:

Il examine et évalue les questions

touchant l'éducation dentaire et formule les orientations à suivre.

L'Association dentaire canadienne est l'organisme qui agréé officiellement les institutions d'enseignement. Elle examine et revoit périodiquement à cette fin, les programmes de formation et de spécialisation offerts par les facultés de médecine dentaire des universités canadiennes, les programmes de formation des assistants dentaires offerts par les collèges ou les cégeps, ainsi que les programmes de formation des hygiénistes dentaires offerts par les institutions collégiales ou universitaires.

En outre, le conseil veille à faire passer, deux fois par année, le test d'aptitude dentaire (TAD) aux étudiants qui se préparent à entreprendre leurs études de médecine dentaire, afin de vérifier leur aptitude à l'étude et leur dextérité. Plus de 1800 étudiants passent le test chaque année.

Le conseil aide également les membres corporatifs et les organismes provinciaux émetteurs de permis en matière d'éducation dentaire. Il est aussi chargé d'examiner le rôle que l'ADC doit jouer en matière de formation continue et prend les initiatives qu'il juge nécessaires pour accomplir sa tâche.

Le travail du conseil est partagé, en grande partie, entre quatre comités:

a) la formation pré-universitaire, universitaire et post-universitaire;

b) la formation des auxiliaires;

c) les tests d'admission;

d) la formation continue.

Le conseil de déontologie:

Ce comité élabore les règles de déontologie et veille à promouvoir l'éthique professionnelle. L'Association a son propre code de déontologie qu'elle revoit régulièrement, pour favoriser l'excellence dans la pratique de la médecine dentaire et protéger le public contre toute pratique ou traite-

ment contraire à l'éthique professionnelle. Le code sert de guide aux organismes provinciaux et aide à uniformiser les règles de déontologie au pays.

Le conseil des services de santé:

Il comprend trois comités et plusieurs sous-comités répartis ainsi:

a) le comité de la santé publique et de la prévention, dont les sous-comités se penchent sur les questions de la fluoration, de l'alimentation et de la protection contre la radiation;

b) le comité des programmes et des services dentaires, dont les nombreux sous-comités s'occupent de diverses questions: les soins dentaires aux handicapés, les soins gériatriques, les services payés d'avance, les services dentaires financés à même les deniers publics, l'uniformisation des systèmes de codage et la liste des services, ainsi que les nouveaux modes de prestations des services;

c) le comité des auxiliaires dentaires.

Le conseil établit et évalue les méthodes de prévention et de traitement des maladies et des anomalies dentaires, en étudiant les divers systèmes de prestation des services, y compris les programmes de santé publique. Il établit également le coût des diverses méthodes, examine le besoin en personnel auxiliaire et réunit la documentation qui est mise à la disposition des membres corporatifs.

Le conseil des services hospitaliers:

Le conseil aide à maintenir l'excellence des soins dentaires dans les hôpitaux canadiens. C'est lui qui agréé les services dentaires des hôpitaux, en regard de fonctions et de responsabilités qu'il établit lui-même, compte tenu des exigences des membres corporatifs. Il examine également les lois provinciales régissant ces services.

Le conseil des services d'information:

Il oriente, par ses lignes directrices, la diffusion de l'information ache-

minée, par divers moyens, à la profession et au public, à des fins éducatives. Il guide ainsi les activités du sous-comité du Mois national de la santé dentaire qui porte à l'attention de tous l'importance d'une bonne hygiène dentaire.

Il est chargé de l'édition d'un grand nombre de plaquettes et de brochures sur la santé dentaire et la carrière du dentiste, qui sont constamment mises à jour et diffusées à un rythme de plus d'un quart de million d'exemplaires par année. Il a aussi approuvé une collection de films éducatifs qui sont mis à la disposition du public et de la profession.

Le Journal de l'ADC, des communiqués et des bulletins d'information tiennent les membres de la profession au courant de ce qui se passe tandis que le personnel du siège social répond, chaque semaine, à plus de 200 demandes de renseignements de la part du public, des dentistes, des médias d'information et du monde des affaires.

Le conseil des assurances et placements

Les membres du conseil d'administration du *Canadian Dental Service Plans Inc. (CDSPI — Régimes des rentes et d'assurances subventionnés par l'ADC)* forment, chaque année, le conseil des assurances et investissements.

L'Association offre aux dentistes canadiens un régime enregistré d'épargne-retraite et un régime d'assurance-groupe. Se fiant à des études de marché et à ses négociations avec les assureurs quant au coût et aux modalités de la protection offerte, le conseil recommande le genre d'assurance et de protection dont on a besoin.

Il examine les contrats d'assurance, recommande les meilleures façons de répartir les excédents et le fonds de réserve, et conseille l'association sur les régimes de retraite et d'épargne-retraite qu'elle parraine.

Il fait aussi ses recommandations sur l'engagement d'une agence de perception des primes et les modalités de perception à prévoir dans le contrat, et en établit les tâches dans un souci d'efficacité et de rentabilité.

Le conseil des candidatures:

Ce conseil comprend trois membres élus lors l'assemblée annuelle du bureau des gouverneurs et est présidé par le président-sortant. Il dresse la liste des postes à pourvoir par voie d'élection, invite les membres à présenter par écrit des candidats à chaque poste, établit l'éligibilité des candidats et fait ses propres propositions pour s'assurer qu'il y ait au moins un candidat éligible à tous les postes vacants.

Le conseil des affaires étudiantes:

Ce conseil s'occupe des questions concernant les étudiants et leurs activités. Il organise le congrès annuel des étudiants en médecine dentaire du Canada et suggère les orientations qui guident la participation des étudiants aux activités nationales et internationales qui les concernent.

LA BIBLIOTHÈQUE

La bibliothèque *Sydney Wood Bradley Memorial*, qui est située au siège social de l'Association, sert de centre d'information et de documentation pour la profession dentaire. Elle comprend une collection limitée de publications sur la dentisterie ainsi que des périodiques, en outre d'offrir de l'information et de la documentation à jour sur la formation continue, de même que des ouvrages de référence intéressant la profession à

l'échelle nationale. La bibliothèque sert aussi d'informathèque en réunissant l'information et la documentation que lui envoient les associations provinciales sur les questions dentaires ayant une portée nationale.

LES RELATIONS NATIONALES ET INTERNATIONALES

Outre ses relations avec les sociétés nationales mentionnées précédemment, l'ADC entretient des rapports avec l'Association des hygiénistes dentaires du Canada et l'Association des infirmiers et des assistants dentaires du Canada.

Sur la scène internationale, l'Association se tient en rapport avec l'*American Dental Association (ADA)* et est affiliée à l'Organisation internationale de normalisation (ISO), à l'Organisation mondiale de la santé (OMS), et à la Fédération dentaire internationale (FDI) pour assurer un échange constant d'information scientifique et participer aux divers courants de pensée du monde de la dentisterie.

Par leurs relations, ces organismes travaillent ensemble vers un même but: offrir, au Canada, le meilleur service dentaire possible et servir le public le mieux possible.

CDA Retirement Savings Plan

Unit values of the Canadian Dental Association's Retirement Savings Plan stood as follows on November 30, 1981.

<i>Common Stock Fund</i>	\$53.5704
<i>Fixed Income Fund</i>	\$26.4885
<i>Guaranteed Fund</i>	\$21.7421
<i>Balanced Fund</i>	\$12.3083

Total assets (market value) of the plan were \$31,536,598.

The previous month's figures as of October 31, 1981, stood as follows:

low:

<i>Common Stock Fund</i>	\$49.9292
<i>Fixed Income Fund</i>	\$24.4424
<i>Guaranteed Fund</i>	\$21.4612
<i>Balanced Fund</i>	\$11.6586

Total assets (market value) of the plan were \$30,224,716.

For further information write to: Canadian Dental Service Plans Inc., P.O. Box 7500, Station A, Toronto, Ontario M5K 1A0.

Régime d'épargne-retraite de l'ADC

Les valeurs respectives du Régime d'épargne-retraite de l'Association Dentaire Canadienne étaient les suivantes au 30 nov 1981.

<i>Fonds d'actions ordinaires</i>	\$53.5704
<i>Fonds à revenu fixe</i>	\$26.4885
<i>Fonds garanti</i>	\$21.7421
<i>Fonds de placement</i>	\$12.3083

L'avoir total (valeur marchande) du régime s'élevait à \$31,536,598.

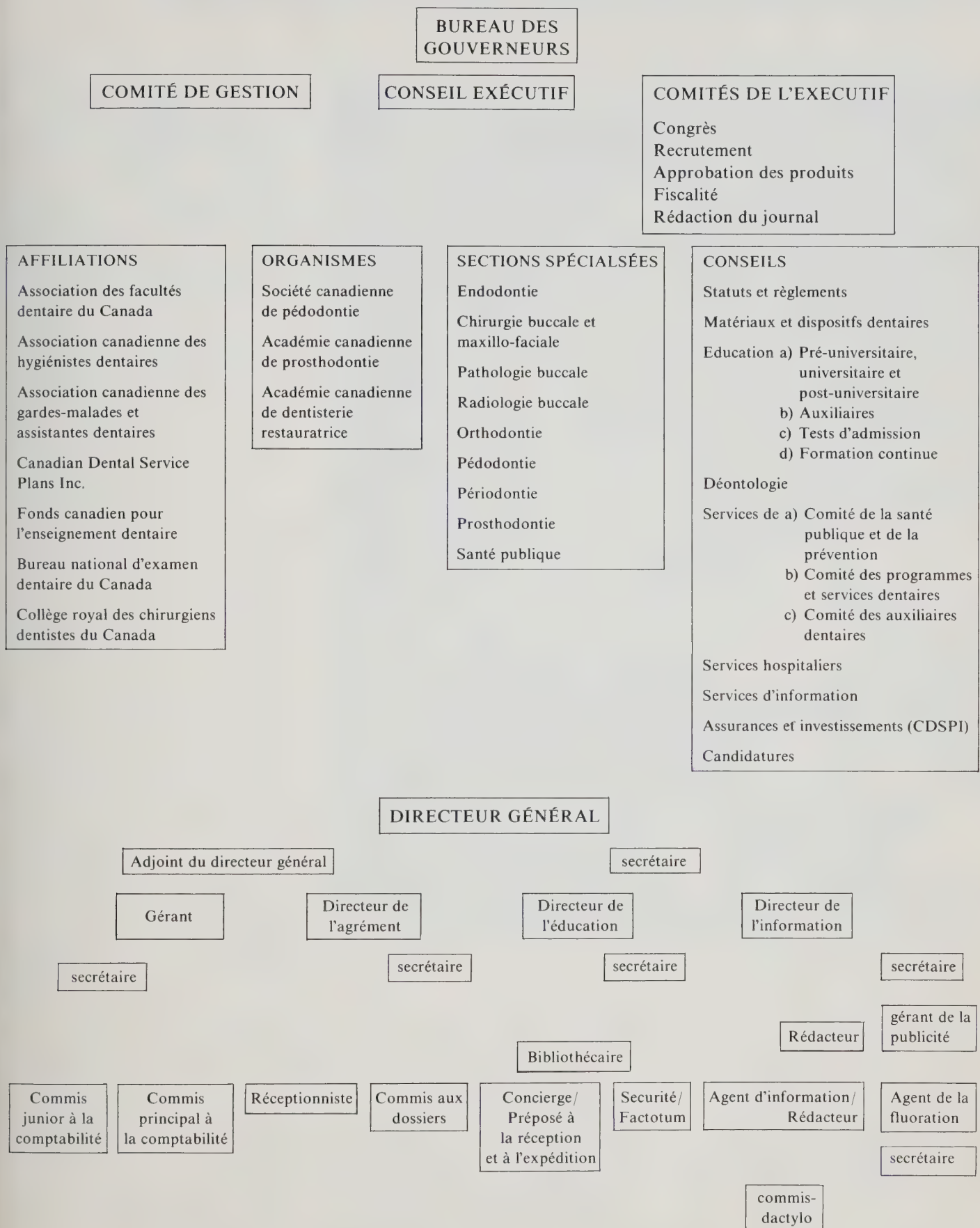
Au 30 octobre 1981, les chiffres du mois précédent étaient les suivants:

<i>Fonds d'actions ordinaires</i>	\$49.9292
<i>Fonds à revenu fixe</i>	\$24.4424
<i>Fonds garanti équilibré</i>	\$21.4612
	\$11.6586

L'avoir total (valeur marchande) du régime s'élevait à \$30,224,716.

Pour obtenir tout renseignement supplémentaire, prière de s'adresser aux: Régimes des rentes et d'assurances subventionnés par l'ADC, P.O. Box 7500, Station A, Toronto, Ontario M5K 1A0.

ORGANIGRAMME DE L'ASSOCIATION DENTAIRE CANADIENNE



Les Actualités

Le Centre de ressources étend ses services



M. Hubert Drouin est heureux d'annoncer que Mme Margo Beres a été nommée bibliothécaire de l'Association dentaire canadienne.

Mlle Beres, qui a aussi travaillé à la bibliothèque du Canadien National, à la bibliothèque de l'Hôpital général de Montréal et à l'Institut canadien de micro-reproduction historique, à Ottawa, ajoute que la bibliothèque offrira aussi le service ordinaire de référence et d'aide à la recherche, ainsi qu'un service de prêt de livres et de périodiques dans tout le pays.

Originaire de Montréal, elle détient un baccalauréat et une maîtrise

en bibliothéconomie de l'Université McGill.

Dentistes, chercheurs, membres affiliés de l'ADC et membres des professions, de la santé peuvent désormais puiser leur information au centre de ressources qui a été mis à jour au siège social de l'Association dentaire canadienne, à Ottawa.

L'inventaire de la bibliothèque de l'ADC est terminé et il ne reste plus qu'à en éliminer le matériel inutile. La

collection actuelle fera l'objet d'un catalogue qui sera publié bientôt et le Journal fera état régulièrement des nouvelles acquisitions.

Mlle Margo Beres, bibliothécaire de l'ADC depuis le mois d'avril 1981, précise que son service se propose de maintenir une collection limitée d'ouvrages portant sur la médecine dentaire, mais qui sera d'actualité: travaux de base et classiques, périodiques et information servant à la formation continue. «La bibliothèque comprendra des documents du gouvernement, des statistiques et les publications de diverses sociétés qu'on pourrait difficilement se procurer à l'extérieur d'Ottawa», dit-elle. On mettra également l'accent sur l'information concernant les sujets touchant la pratique dentaire.

En outre, la bibliothèque offrira un service informatisé de recherche documentaire par la truchement de MEDLINE, une base de donnée produite par la librairie nationale de médecine des États-Unis. Cette source permettra d'offrir aux usagers les références bibliographiques de plus de 475 journaux dentaires publiés dans le monde.

«Le nouveau service informatisé nous aidera à nous tenir au courant de toutes les publications dentaires du monde au fur et à mesure de leur parution. C'est un instrument de première main, rapide et efficace pour tous les usagers de la bibliothèque», de dire Mlle Beres.

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Clinical evaluation of composite and amalgam posterior restorations: One year results

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SUMMARY

One hundred and forty-three posterior composite restorations and 135 posterior amalgam restorations were evaluated after one year, and it was found that 89.5 per cent of the composites and 94.8 per cent of the amalgams were successful. Since the composites and amalgams were quite comparable, they will continue to be evaluated annually.

A new composite filling material is presently being marketed for placement in Class I and Class II cavities in posterior teeth. This is an attempt to provide the dental profession with a posterior restorative material possessing improved esthetics. Reports of clinical studies comparing various composite materials with amalgam have indicated that they possess some similar desirable characteristics.¹ However, composite restorations have been shown to be markedly inferior to amalgam in their resistance to wear.² A study which compared this new composite restorative with a proprietary one in posterior

teeth showed it was superior in resistance to wear after three years.³ The purpose of this clinical trial is to compare the performance of this new composite with amalgam in Class I and Class II posterior cavities.

MATERIALS AND METHODS

Using a half mouth technique, 101 children received right to left pairs of composite and silver amalgam restorations in both primary and permanent posterior teeth. The teeth were prepared for both materials by final-year dental students working at the University of British Columbia's summer clinic. Standardized procedures were followed: rubber dam, 90° cavo-surface margins, removal of unsupported enamel, mechanical matrix with wedge, etc. The materials used were capsulated Dispersalloy* and Profile**. The amalgam capsules were mechanically triturated, condensed, carved, and finished by the individual operators.

* Johnson & Johnson Co.

**S.S. White Co.

Table I.
**Criteria for Evaluation of Amalgam
and Composite Restorations**

Criteria	Description
1. Sound	Functional, without defects
2. Chipped margin	Void, due to loss of material or enamel
3. Fractured	Detectable fracture through the material
4. Occlusal wear	Visible facets or dishing out
5. Caries	Caries at margins of restoration
6. Needs replacing	Extensive defect, large void, no contact
7. Replaced	Original restoration has been replaced

Table II
**Amalgam and Composite Restorations Evaluated Clinically
One Year After Restoration**

	Surfaces					
Material	One		Two		Three	Total
	Occls.	Buccals and linguals	Occl.- lingual	Class II's		
Amalgam	69	20	12	28	6	135
Composite	73	23	15	21	11	143

Table III
**Condition of Amalgam and Composite Restorations
One Year After Insertion**

Restorations	Conditions							Total
	1	2	3	4	5	6	7	
Amalgam:								
Occlusal	65	2				2		69
Buccal-lingual	20							20
2 Surface	39	1						40
3 Surface	4	1					1	6
Totals:	128	4				2	1	135
Composite:								
Occlusals	68	3		2				73
Buccal-linguals	23							23
2 Surface	29			3			4	36
3 Surface	8			1			2	11
Totals:	128	3		6			6	143

One operator dispensed, mixed and directed the insertion of all Profile restorations, following the manufacturer's instructions. A 30 per cent orthophosphoric acid etch was placed on dried surface enamel for 90 seconds. Following washing and drying of the preparation, the surface enamel was coated with the bonding agent. Using a syringe, the composite was placed in the preparations to a slight overfill and left three to five minutes for curing. The matrix was removed and the composite trimmed with 12-sided burs as indicated by the individual occlusion. Central fossae were not accentuated and no attempt was made to include supplemental grooves. At baseline all restorations met the standards of the Department of Restorative Dentistry, and postoperative bitewing radiographs were taken for all interproximal restorations.

Using mouth mirror, portable light and explorers, the restorations were re-evaluated 12 months after placement by one clinician in school health rooms. Criteria for evaluation are described in **Table I**. Bitewing radiographs were requested from private dentists for those children who had interproximal restorations.

RESULTS

Twelve months after insertion, 143 composite and 135 amalgam restorations were available for evaluation in posterior primary and permanent teeth (**Table II**). The composite restorations included 73 occlusals, 15 occlusal-linguals, 21 Class II's, 23 buccals or linguals, and 11 three-surfaces or more. The amalgam restorations included 69 occlusals, 20 buccals and linguals, 12 occlusal linguals, 28 Class II's and six three-surfaces or more. The criteria for evaluation were sound or chipped margins, fractured restoration, occlusal wear, caries, needs replacing, and replaced.

One hundred and twenty-eight of the composite restorations were sound after one year, a success rate of 89.5 per cent (**Table III**). Of the 135 amalgam restorations, 128 remained sound, a success rate of 94.8 per cent. Six of the composites were replaced to only one amalgam, although two amalgams required replacing. Both were very large restorations and had lost significant supporting enamel. Thirteen of the composite restorations were in primary molars, 11 of which were two or more surfaces. Eleven of the amalgam restorations were in primary molars, nine of which were two or more surfaces. Two of the primary molars containing amalgam restorations had exfoliated.

Bitewing radiographs were obtained from 11 children, revealing 17 composites and 20 amalgam interproximal

restorations. Criteria for evaluation were sound (free of defects), gingival overhang, voids and poor contour. Sixteen of the composite restorations were sound, with one exhibiting a concave proximal margin. Seventeen of the amalgam restorations were radiographically sound, while three had gingival overhangs.

DISCUSSION

The results after one year indicate that Profile is comparable to a high copper amalgam in resistance to wear and margin integrity. There was a tendency for the class II composites to be replaced more frequently than the class II amalgams. Because these restorations were replaced by private dentists, it is difficult to know the reason(s) for replacement.

Composite restorations may be bonded to enamel through the acid etch technique.⁴ This feature allows alteration of the standard amalgam cavity preparation. That is, a mechanical lock need not be incorporated in the cavity preparation, therefore reducing the amount of healthy tooth structure that has to be removed. Dentists should approach this concept with caution because long term clinical trials have not been done to show that the mechanical bond of composites to enamel persists in areas of function.

The clinical evaluation of wear patterns and degree of wear were subjective in nature. No effort was made to evaluate these criteria objectively in this study. Methods for objective evaluation of wear have been described and used in some clinical studies.^{5,6} They were not incorporated in the design of this study because of the large number of surfaces being evaluated. Furthermore, it was felt that since a half-mouth technique was being used with amalgam as the control material, clinical evaluation would be adequate.

The excessive wear observed in posterior composite restorations is thought to be due to the failure of the vinyl silane bond between the filler and the bis-GMA resin.⁷ As the resin is lost due to masticatory function, the filler particles are exposed and the bond is broken, allowing the filler to break away. This observation was not made in *in vitro* studies, which indicates that there must be some agent or agents present *in vivo* that causes this failure. Therefore, clinical trials or composite restoratives in posterior teeth are indicated.

In a clinical trial reported by Moffa and Jenkins,³ several composite materials were compared clinically in posterior teeth. After three years, the strontium glass (Profile)

and tantalum glass formulations were superior to a proprietary composite in maintenance of anatomic form. They were similar for colour match, cavo-surface marginal discoloration, marginal adaptation and caries incidence. These findings suggest that the new composite, Profile, may have potential for restoration of posterior teeth.

The pattern of wear of composites is the primary area of interest. A 1971 report⁸ on composite vs. amalgam found that 23 per cent of composites had altered anatomic form, compared to no change in the amalgams after one year. The present study found that only 4 per cent of composites had clinically detectable occlusal wear. Although this finding would tend to indicate that Profile is a superior composite for placement in posterior teeth, extreme caution must be exercised because of the limited one-year observation period. For this reason, the composite-amalgam study restorations will continue to be monitored annually to determine if the performance of Profile remains comparable to Dispersalloy.

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Veneering amalgam restorations

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SUMMARY

A method of veneering the buccal surface of amalgam restorations is presented. The choice of other types of restorative resins is also discussed.

The restoration of severely broken teeth with large dental amalgams, often retained with pins, is an accepted technique. However, their esthetics is limited, particularly on the buccal surfaces of premolar teeth. These areas are often highly visible to the patient, and the show of amalgam is unattractive. Full coverage of the tooth with a porcelain fused to gold alloy crown can improve the esthetics by matching to the adjacent teeth and will act as a brace around the tooth structure and restoration. However, there may be instances where it is not expedient to crown the tooth. The veneering of the buccal surfaces with restorative resin can provide an esthetic "long-term temporary" result. This paper is a clinical case report to illustrate this concept.

The patient, a female in her 60s, is fractured the buccal cusp of the upper right first premolar. The tooth had a large MOD amalgam restoration of several years' duration. As she required other prosthodontic treatment and there was the possibility that this tooth might require endodontic therapy, it was decided to restore the tooth with a pin-retained MODB amalgam restoration as the immediate treatment and to re-evaluate the tooth in the over-all treatment plan. The patient, however, felt very conscious of the large area of visible grey amalgam and wanted a more esthetic coverage. A restorative resin veneer was chosen. Simple resin or composite resin materials can be used, but the former material, Sevitrone*, is demonstrated.

At a subsequent appointment for the placement of the pin-retained MODB amalgam, the tooth was isolated and a buccal retentive window was prepared in the hard amalgam, using high speed cutting with water spray (Fig 1). The preparation extended incisally just short of the cusp

tip and gingivally to the tooth structure. The mesial extension into the embrasure area allowed most of the metal to be masked.

With the use of simple or composite resin veneering, the acid etching of any remaining buccal enamel will aid significantly in retention. Thirty per cent phosphoric acid was applied for one minute to the enamel and the area thoroughly washed and dried (Fig 2).



Fig 1 Buccal retentive window prepared in MODB amalgam extending gingivally to the remaining enamel surface.

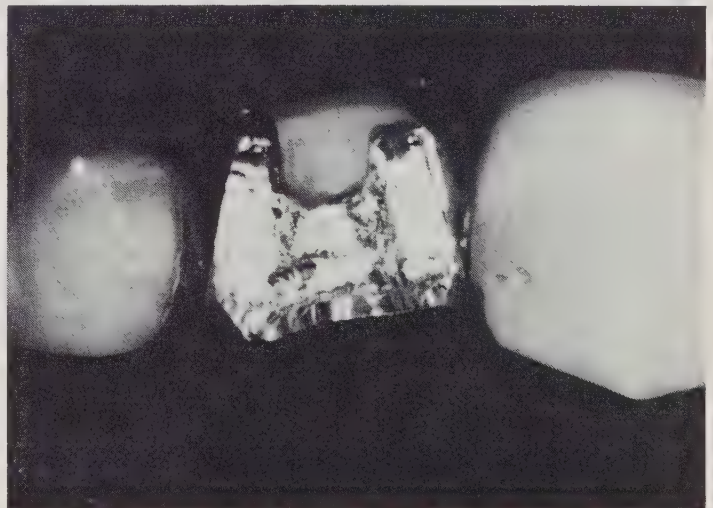


Fig 2 Enamel adjacent to the amalgam acid etched with 30 per cent phosphoric acid solution.

*Amalgamated Dental Ltd., Division of Dentsply International, Toronto, Ontario.



Fig 3 Buccal veneer of simple resin built up using a camel hair brush.



Fig 4 Buccal view of completed resin veneer of amalgam restoration.

Using a camel hair brush, Sevitrion liquid and powder were applied to the surface of the metal, first in the retentive areas and to the etched enamel surface. Opaque S6 powder can be used initially in combination with any shade to better mask out the greying effect from the amalgam. Using liquid and suitable powder shades with the brush transfer technique, the surface was built up to contour the buccal surface of the tooth (**Fig 3**). The polymerized resin was finished down to a smooth contoured surface, using a tungsten carbide-tipped finishing knife and a bladed finishing bur. The resin was polished with an aluminum oxide impregnated disc. Regular steel plug finishing burs can also be used for gross surface reduction.



The final result is esthetic for a period and can be free of any functional loading in lateral excursions (**Fig 4 and 5**).

DISCUSSION

Veneering amalgam restorations with a dental resin is an acceptable way to restore esthetics to the buccal surfaces of maxillary posterior teeth. Simple resin can be applied with a brush to flow into the prepared retentive areas. Control of the placement and contour rests with the operator and the final finishing and polishing is minimal. The material will also tag well into adjacent enamel which has been acid-etched.

Composite resin materials can also be used to veneer amalgams in a similar way, using acid etch technique with the bonding agent flowed onto the enamel. These materials will be harder and more abrasion-resistant than simple resin. However, with the autopolymerizing materials there is limited time to adapt the composite resin to the prepared amalgam window before the material hardens. The visible or ultra-violet-light polymerized composite resins are also useful as temporary veneers, with their limitless working time to adapt to the surface of the tooth or restoration.

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A comparative microscopical study of resins bonded to buccal enamel surfaces

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ABSTRACT

The aims of this laboratory study were: (1) to compare the ability of five commercial resin systems to adapt to buccal enamel surfaces and, (2) to clarify the nature of resin-enamel bond failures. The study sample consisted of 60 buccal enamel surfaces, which were divided into six equal groups. Following standard preparation of the enamel surfaces, five commercial resins were applied following manufacturers' instructions. In another instance, these instructions were modified in an attempt to improve bonding. The adaptability of resins to enamel surfaces was compared using optical and scanning electron microscopy. Defects with all resin systems were observed. It was concluded that: (1) observation of resins with the naked eye is not a reliable assessment, (2) there are some marked differences in resin-enamel bonds as a consequence of the resin system, and (3) failure of bonded surfaces is multifactorial.

The mechanism of resin-enamel bonding is a point of debate. One view holds that the resin enamel bond is principally mechanical in nature.¹⁻³ A differing opinion is that a chemical bond may result between the resin and enamel crystal.^{4,5} A clearer understanding of the bonding mechanism and the underlying causes of bond failures might increase bonding success and decrease bonding failures in clinical practice. For this reason, the subject deserves further investigation.

Two of the most important variables influencing bond quality are the etched enamel surface morphology and the resin system used. Previous studies by Galil and Wright^{6,7} have established that (1) there are variations in enamel surface morphology following acid etching and (2) acid type and concentration are key factors when acid etching enamel. These factors affect bond quality. The present study focuses on resin systems. Its purposes are (1) to compare the abilities of five commercial resin systems to

adapt to the buccal surfaces of human, permanent, posterior teeth and (2) to clarify how resin systems contribute to bond failures.

MATERIALS AND METHODS

The buccal enamel surfaces of 60 teeth were pumiced, washed thoroughly and air dried. The teeth were sectioned using the Gilling and Hammco section machine. Cuts were made at the cemento-enamel junction and the roots were discarded. A cut was also made on the crown between the buccal and lingual surfaces and the lingual surfaces were then discarded. The buccal surfaces were mounted on glass slides with sticky wax.

Ten specimens were used to test each of the five commercial resin systems.* Buccal enamel surfaces were treated and resins were mixed according to the specific manufacturer's instructions. Each test resin was applied to the surface of the mounted buccal enamel surface and polymerization was carried out according to the manufacturer's instructions. Due to difficulties encountered with the Concise brand, an additional 10 test specimens were used for this resin with a procedural alteration. When using the paste, two parts A and one part B were used.

The surfaces were examined initially with the naked eye and stereo-light microscope. Following this, a few thin sections of the resin enamel interface of approximately 15 microns thick were prepared with the Gilling and Hammco machine by cutting perpendicular to the glass slide and to the buccal enamel surface. These sections were examined with light, polarized and phase contrast microscopy. The polarized microscope offered an unique way for examining the resin enamel interface, since enamel is a polarizing substance and the resin is a non polarizing substance.

*Concise brand, ortho kit — 3M
Caulk Solo Tach — L.D. Caulk
Caulk Auto Tach — L.D. Caulk
Caulk Nuva System for orthodontics brackets — L.D. Caulk
Directon-11, T.P. Laboratories

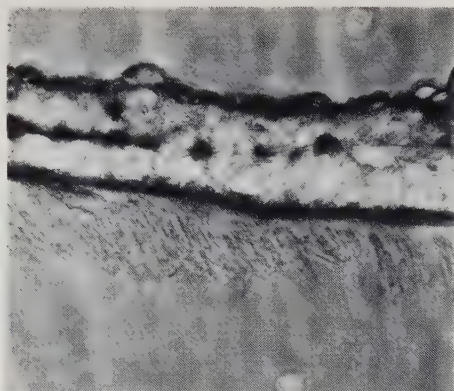


Fig. 1. Light photomicrograph shows typical tag projections from resin after dissolution of etched enamel. Tag represents penetration into etched enamel. Original mag. X 400.

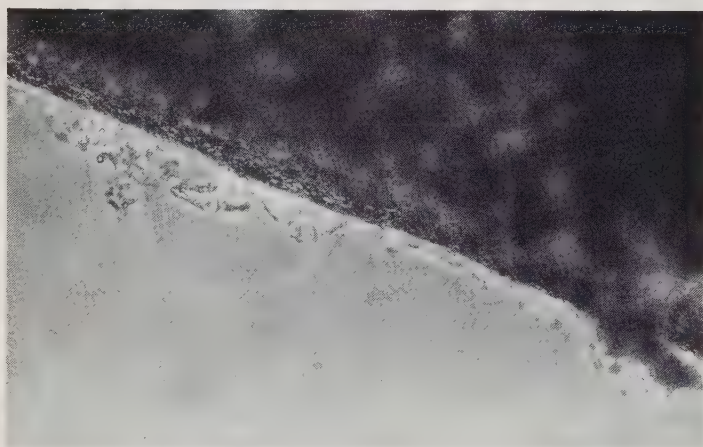


Fig. 2. Light micrograph showing a short and defective tag. Notice the defective projections arising at the resin enamel interface. Original mag. X 400.

After anamel dissolution with 10 per cent hydrochloric acid, the resin enamel interface of these light optical sections was re-examined. Continuous observation of enamel was made until all enamel was removed and the remaining part of the mounted buccal enamel surface was processed for scanning electron microscopy evaluations. The resin film was mounted on a stub so that the resin enamel interface was upwards, thus exposing resin tags for direct examination. The specimens were then desiccated and vacuum coated with a 200A layer of gold/palladium and examined in an Hitachi HHS2R scanning electron microscope.

Recordings of observations were made for all specimens. Tag lengths were assessed from the outer enamel surfaces. Resin tags also were classified as distinct or blunt. Microholes in the resins and flatness of the resins at the enamel resin interface also was noted. Data were summed and averaged for each specimen group.

RESULTS

When viewed prior to demineralization, using a stereo microscope or the naked eye, all specimens exhibited an apparently acceptable adaptation of the adhesive to enamel. The non-mineralized sections were also viewed with polarizing microscopy. Under this condition, a marked variation in the length of the resin tags was observed. The tags are the result of resin penetration into the etched enamel and likely are indicative of bond strength. Following dissolution of the enamel and viewing

Table 1
Relative findings for five commercial resin systems
based upon 10 specimens for each group.

Resin Material	Length of Tags "Light microscopy"	Morphology of Tags SEM Distinct/Blunt	Microholes	Flat Areas
Manufacturer's instructions	5-10	0/	+++	+++
Concise Modified	25-50	90/10	+*	+
Solo Tach	25	80/20	++	+
Auto Tach	25	70/30	++	+
Nuva Seal System	5-25	10/90	+++++	+++++
Directon II	25	60/40	++	+++

+++++ indicates highest amount of defect
+ indicates lowest amount of defect

with the standard light microscopy, marked differences in resin tags were evident. Those specimens which were considered best showed uniform resin tags, with an average length of 30 microns.

The specimens, which were considered of poor quality, had short tags, varying from 0.5 to 10 microns. They failed to penetrate the enamel uniformly (compare Fig 1 and 2). A comparison of the average tag lengths for each resin system as observed by light microscopy is shown in Table I. Three of the resin systems had comparable results (Solo Tach, Auto Tach and Directon II) and one showed variable tag lengths (Nuva Seal). The Concise system initially demonstrated the poorest resin penetration. However, after the procedural modification good results were achieved.

The scanning microscope also revealed a considerable variation in the morphology of the resin tags (compare Fig 3 and 4). The better specimens exhibited resin tags which were uniform and resembled the outlines of etched enamel prisms (Fig 3), whereas the poorer tags were short, blunted and irregular (Fig 4). The comparative estimates of distinct versus blunt tags are offered in Table I.

Because the scanning microscope was able to survey the topography of the whole buccal surface in contrast with sectioned material, additional defects were observed. These defects included flat areas where the resin had apparently polymerized before it had started to penetrate the etched enamel surface (Fig 5). Another defect was complete absence of resin, in the form of microholes, ranging from 10 microns to 100 microns in diameter (Fig



Fig. 3. Scanning electron micrograph showing excellent resin tags, exposed by dissolution of the underlying etched enamel. Original mag. X 1750.

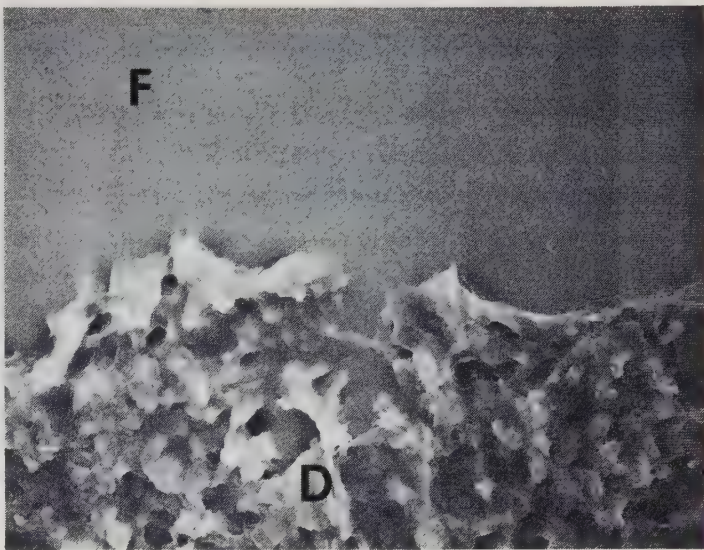


Fig. 4. Scanning electron micrograph of a short and defective tag (D) and flat surface (F). Original mag. X 850.

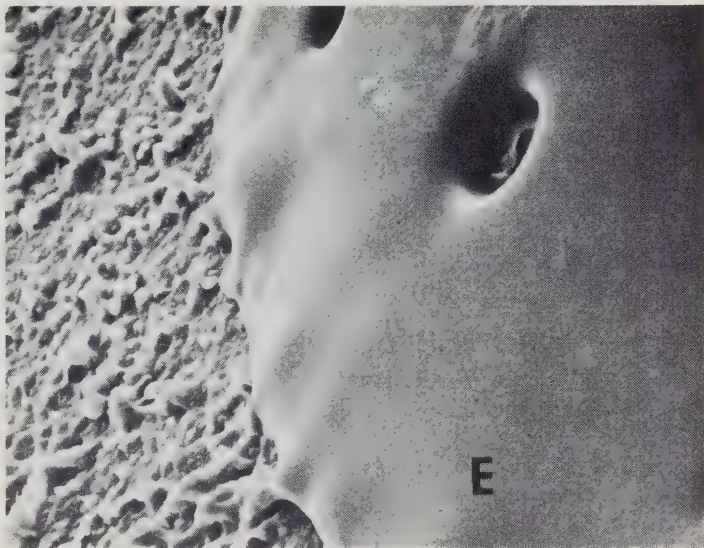


Fig. 5. Scanning electron micrograph showing the effect of early polymerization (E), while the remaining part exhibited an attempt by the resin to penetrate the etched enamel. Original mag. X 350.

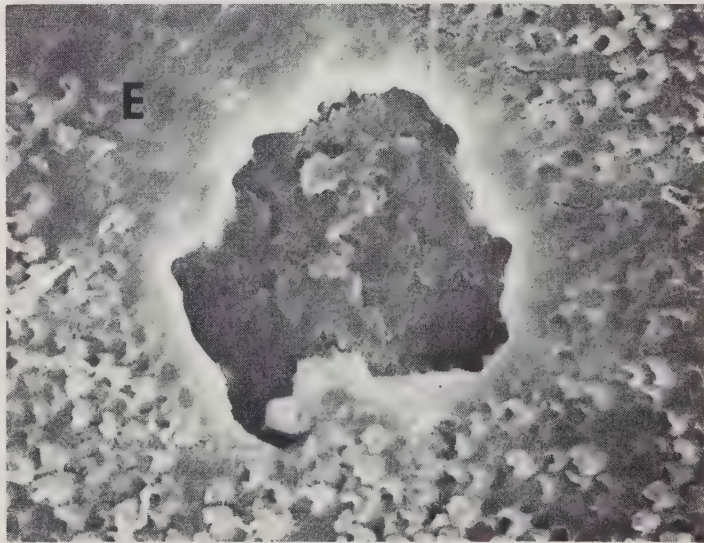


Fig. 6. Scanning electron micrograph showing the effect of early polymerization (E) showing the flat film of resin attempting to cover the hole (blister like formation). Original mag. X 600.

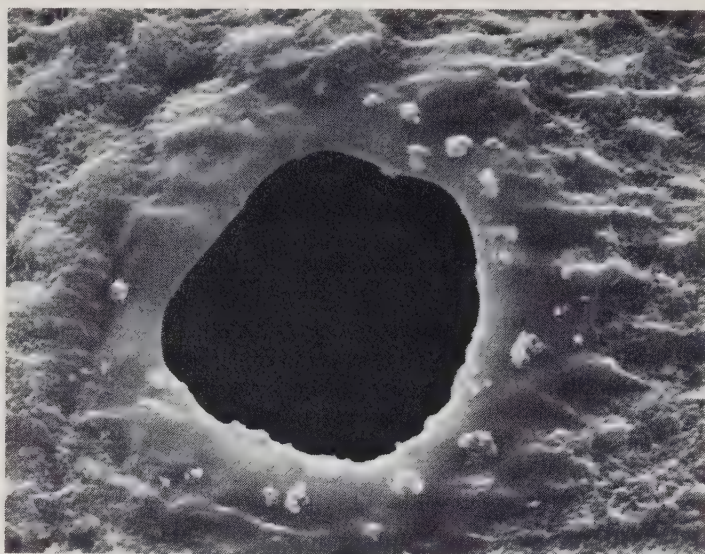


Fig. 7. Scanning electron micrograph of a totally defective resin enamel interface surface, showing complete lack of resin tags and a central hole in the resin surface. Original mag. X 600.

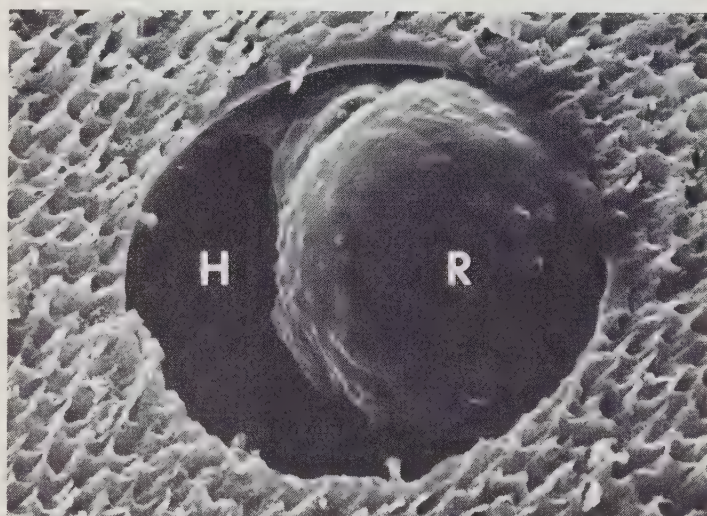


Fig. 8. Scanning electron micrograph showing an excellent resin adaptation to etched enamel except a central area denoting lack of resin hole (H). Notice the independent polymerization of the resin in the centre (R). Original mag. X 700.

6,7 and 8). An additional defect consisted of a thin flat film of resin covering a hole (Fig 6). These observations are also summarized in Table I, using comparative symbols. Interestingly, no specimen was completely ideal. Some, with distinct resin tag morphology in one area, contained blunt tags in other areas as well as a few microholes or flat regions.

DISCUSSION

The mechanisms of bonding and bond quality are of prime concern to researchers and clinicians. Dissolution of the enamel surface enables the resin to flow into microporosities.⁸ While there have been a few claims of primary (chemical) bonds contributing to adhesion, this has not been demonstrated conclusively.^{6,7} It is considered, therefore, that the principal type of bonding is physical, whereby the resin is mechanically locked into pores and irregularities in the etched surfaces.⁹ The extent

of penetration into enamel can be assessed by measuring the length of resin tags after complete enamel removal, and it is considered that tag length is a direct indicator of bond strength.¹⁰

Previous studies by Galil and Wright^{6,7} have established that variations in the acid type, and concentration and time of acid application cause variations in the depth of the etch which can influence tag length. These investigators also reported that the etching pattern is affected by variations in the buccal enamel morphology of human posterior permanent teeth. Since the present study was carried out on buccal enamel surfaces, and followed manufacturers' instructions, some of the variations observed in tag length and morphology have to be attributed to enamel etch quality.

The present investigation also revealed important differences between the resin systems tested. Observations which were made on sectioned material with light microscopy enabled a measurement of tag length directly, and observations on the undersurface of resin layers allowed an assessment of the morphology of resin tags in three dimensions. Considering one ultraviolet-cured resin system (Nuva Seal — Nuva Tach) and four self-curing resins (Directon II, Concise, Auto Tach, Solo Tach), the ultraviolet-cured resin gave the poorest results. It was somewhat surprising that the unfilled resin (Directon II) failed to penetrate deeper than the filled self-curing resins.

All of the self-curing resins polymerized in approximately the same amount of time, and their working time was related to the setting time. Auto Tach and Solo Tach gave relatively satisfactory resin replicas but had the problem of requiring mixture of the entire package, with a subsequent shelf life of only three months. This could result in a relatively expensive procedure for a general dentist using the products infrequently. Directon II is mixed for each individual patient and also is inexpensive, but the poor quality of its resin films could outweigh these advantages. Concise also had the advantage of being mixed for the individual patient, however, following the manufacturer's instructions led to unsatisfactory resin film. It was found that the best resin film of all those tested could be obtained by using approximately double the amount of catalyst for the paste. It is suggested that there is a direct relationship between the quality of film and speed of polymerization. More investigation is needed to establish this point.

There are differing views in the literature as to whether the viscosity and surface tension of a resin material affects its ability to penetrate enamel pores before hardening occurs. Dogan et al¹¹ diluted a composite resin to obtain resins of successively lower viscosity, and they found greater penetration of enamel as the viscosity was decreased. A careful study by Faust et al¹² compared the rate of flow of resins through glass capillary tubes which were considered to simulate crevices in etched enamel.

Using a complex mathematical formula, they derived a so-called penetrability coefficient for a large number of resins, including four of the five used in the present study. In their investigation, the less viscose resin materials flowed more rapidly through the glass tubes and had a higher penetrability coefficient. However, the observations in this study failed to show longer resin tags with resins of high penetrability coefficient as expected from Faust's model system; in fact, the opposite was the case. The findings, therefore, supported Asmusen^{13,14} who concluded that viscosity was not a limiting factor in the penetration of resin into pores of etched enamel surfaces.

In addition to differences between resin tag length and morphology with different resins, defects were also observed in the resin surfaces. Holes with complete absence of resin or flat areas with no resin tags were not uncommon observations. Although these defects were present in all resins tested, they were more frequent in resins having a larger number of blunted resin tags. It is suspected that these defects cause weak points in the resin enamel interface and play an important role in bond failure. These defects cannot be detected clinically since they are too small to be seen with the naked eye. Theoretically, many are large enough to be seen with the stereo light microscope but are rendered invisible because of light reflection from the translucent resin and enamel surfaces. However, they are readily visible when the topography of entire buccal surfaces is surveyed with scanning electron microscopy. It is interesting to note that these findings have not been detailed previously in the literature on the resin enamel interphase, but Williams and Von Fraunhofer¹⁵ have demonstrated the presence of micropore defects in bis-glycidyl methacrylate films applied to steel plates. This resin is the same as the Nuva Seal-Nuva Tach type used in this study. It could be hypothesized that the holes are caused by bubbles in the resin prior to polymerization.

The etiology of the flat areas with no resin tags is more difficult to explain. It could be argued that they resulted from application to type 5 enamel, where the etched enamel has a flat surface morphology. However, this does not seem plausible because of the marked difference in the frequency of these areas in the different resins tested. One explanation considered was that the resin polymerized before penetrating the etched surface. This view was abandoned when it was observed that the Concise resin, which was mixed according to the manufacturer's instructions, generally had many flat areas as well as holes and blunted resin tags and that the Concise resin, which was mixed with approximately twice the amount of catalyst so that it polymerized faster, gave an optimal resin film. This might suggest that there is a direct relationship between speed of polymerization and the quality of the resin surface. Additional work is needed to clarify this point as well.

CONCLUSIONS

Based on this investigation, the following conclusions were reached:

1. Naked eye observation of resin surfaces is not a reliable assessment of resin enamel bonding.
2. If distinctiveness of resin tags, microholes and flat resin areas are considered, differences exist between commercial resins.
3. Failure of bonded surfaces is multifactorial.

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Announcements

CANADA

CDA/ODA 1982 National Convention, The Sheraton Centre, Toronto, Ontario, May 9-12, 1982. Contact: Mrs. W.C. Durham, Convention Manager, Ontario Dental Association, 234 St. George Street, Toronto, Ont. M5R 2P2.

February/février

Mount Sinai Hospital in conjunction with the Ontario Society of Endodontists, One Day Seminar on Facial Pain for the Dental Practitioner (special guest lecturer: Dr. Samuel Seltzer, Temple University, Philadelphia), Mount Sinai Hospital, 600 University Ave., Toronto, Ont., February 12, 1982. Contact: Dr. Wayne Pulver, 159 Willowdale Ave., Willowdale, Ont. M2N 4Y7. Phone: (416) 222-9900.

March/mars

Western Canada Dental Society Winter Convention and Curling Bonspiel, Saskatoon, Saskatchewan, March 11-13, 1982. Contact: Dr. D.C. Johnson, 507, 105 — 21 St. E., Saskatoon, Sask. S7K 0B2.

May/mai

College of Dental Surgeons of British Columbia Convention, Hotel Vancouver, Vancouver, B.C., May 2-5, 1982. Contact: Venue West Executive Services Ltd., 1704 1200 Alberni Street, Vancouver, B.C. V6E 1A6.

Canadian Academy of Prosthodontics Annual Meeting, Toronto, Ontario, May 7-8, 1982. Contact: Dr. B.M. Jackson, Secretary-Treasurer, 22-22 Water St. S., Kitchener, Ont. M2G 4K4.

Journées Dentaires du Québec, Queen Elizabeth Hotel, Montreal, Quebec, May 23-27, 1982. Contact: Dr. Morton R. Lang, Journées Dentaires du Québec, 801 Sherbrooke Street East, Suite 303, Montreal, Que. H2L 1K7. Tel. (514) 481-0397.

June/juin

XIIth Biennial Conference on Education and Research is scheduled to take place in Halifax, Nova Scotia, June, 1982.

Alberta Dental Association 1982 Convention (theme "Prosthodontic Patient of 1980's"), Westin Hotel, Edmonton, Alberta, June 9-12, 1982. Contact: Dr. A. Bene or Mrs. F. Ingham, 4044 Dentistry Pharmacy Centre, University of Alberta, Edmonton, Alta. T6G 2N8.

73rd Annual Conference of the Canadian Public Health Association, Explorer Hotel, Yellowknife, Northwest Territories, June 21-24, 1982. Deadline for submitting abstracts is December 31, 1981. For further details contact: Dr. David Martin, Chairman, Scientific Program Committee, c/o Canadian Public Health Association, 1335 Carling Ave., Suite 210, Ottawa, Ont. K1Z 8N8. Phone: (613) 725-3769.

July/juillet

The Sixth Congress of the International Association of Dentistry for the Handicapped, Harbour Castle Hilton Hotel, Toronto, Ontario, July 20-25, 1982. Contact: The Programme Chairman, Sixth Congress I.A.D.H., Dept. of Paedodontics, Faculty of Dentistry, University of Toronto, 124 Edward St., Toronto, Ont. M5G 1G6.

August/août

Second International Congress on Hospital Dental Practice, Four Seasons Hotel, Toronto, Ontario, August 26-29, 1982. Contact: Dr. C.O. Munro, Programme Chairman, 2nd International Congress on Hospital Dental Practice, 124 Edward Street, Toronto, Ont. M5G 1G6.

International February/février

The Jamaica Dental Association 18th National Convention, Mallards Beach Hyatt Hotel, Ocho Rios, Jamaica, February 14-18, 1982. Contact: Dr. G.C.

McDowell, Chairman, Convention Committee, Jamaica Dental Association, P.O. Box 215, Kingston 5, Jamaica, W.I.

14th European Post-Graduate Congress for Dentists, Davos, Switzerland, February 14-27, 1982. Contact: Freier Verband Deutscher Zahnärzter, Rheinalles 55, D-5300 Bonn — Bad Godesberg, Switzerland.

Chicago Dental Society's 117th Midwinter Meeting, Conrad Hilton Hotel, Chicago, February 21-24, 1982. Contact: Chicago Dental Society, 30 North Michigan Ave., Chicago, IL 60602, U.S.A.

Michigan Dental Association Dental Practice Management Seminar, Boyne Highlands Resort, February 28, 1982. (1st session), March 1 (2nd session), March 2 (3rd session). Contact: Michigan Dental Association, Boyne Seminar Registration, 230 N. Washington Sq., Lansing, MI 48933, U.S.A.

March/mars

The Dental Health Section of the American Public Health Association is inviting papers on a broad range of dental health subjects. This year's theme is "Aging & Public Health: International Perspectives". Deadline date for abstracts March 12, 1982, for presentation at the Association's 110th Annual Meeting, Montreal, Quebec, November 14-18, 1982. Contact: Alic M. Horowitz, 6307 Herkos Court, Bethesda, MD 20817, U.S.A.

April/avril

Annual Scientific Conference of the Irish Dental Association, Limerick Inn Hotel, Ennis Road, Limerick, Ireland, April 21-25, 1982. Contact: Declan Corcoran, Public Relations Officer, Irish Dental Association, 29 Kenilworth Square, Dublin 6, Ireland.

May/mai

1982 World's Fair, Knoxville, Tennessee, May 1 — October 31, 1982. Contact: Anne Russell, Director of Special Affairs, City of Knoxville, P.O. Box 1631, Knoxville, Tennessee 37901, U.S.A. Phone: (615) 521-2549.

Announcements

Australian Dental Association, 23rd Dental Congress, Perth, Australia, May 2-7, 1982. Contact: Australian Dental Association, 23rd Dental Congress, P.O. Box 29, Parkville, Victoria, Australia, 3052.

The Dental Association of South Africa, Diamond Jubilee Congress, Durban, South Africa, May 10-14, 1982. Contact: Dr. Helmut Heydt, Executive Secretary, Dental Association of South Africa, Private Bay One, Houghton, 2041, South Africa.

XIth Annual Meeting of the European Academy of Gnathology, Convention Centre, Paris, May 19-22, 1982. Contact: XI^e Congrès de Gnathologie, P.M.V., B.P. 246, 92205 Neuilly-sur-Seine, France.

The International Congress of Oral Implantologists World Congress VI for Oral Implantology, Hyatt Regency Hotel, Maui, Hawaii, May 21-23, 1982. Contact: Mr. Clifford J. Kirschner, Executive Director, The International Congress of Oral Implantologists, P.O. Box 2277, Grand Central Station, New York, N.Y. 10163, U.S.A.

June/juin

The 88th Annual Meeting of the American Dental Society of Europe, Park Hotel, Sandefjord, Norway. June 28-July 2, 1982. Contact: Hon. Sec. Dr. Brian J. Parkins, 57 Portland Place, London W1N 3AH, England.

The University of Texas — Applications are being accepted for the Postdoctoral Program, Dental Diagnostic Science at the University of Texas Health Science Center at San Antonio, for the class beginning July 1, 1982. Contact: Office of the Associate Dean for Advanced Education, Dental School, The University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Dr., San Antonio, Texas 78284, U.S.A.

July/juillet

The Pan-Pacific International Symposium on Biomaterials, University of British Columbia, Vancouver, British Columbia,

July 28-30, 1982. Papers are invited (closing date April 2, 1982) on biomaterials especially in orthopedic, cardiovascular and dental materials and tissue mechanics. Contact: Dr. R.H. Roydhouse, Secretariat Biomaterials '82, 1704, 1200 Alberni St., Vancouver, B.C. V6E 1A6.

September/septembre

Asociacion Argentina de Ortopedia Funcional de Los Maxilares, 25th Anniversary, Buenos Aires, Argentina, September 19-23, 1982. Contact: Dr. S.A. Gandolfo, Secretario, Asociacion Argentina de Ortopedia Funcional de Los Maxilares, Buenos Aires, Argentina.

October/octobre

Fédération Dentaire Internationale, 70th Annual World Dental Congress, Vienna, Austria, October 11-16, 1982.

November/novembre

British Dental Association — Metropolitan Branch, First International Prosthodontic Symposium, Royal Lancaster Hotel, London, England, November 25-27, 1982. Contact Dr. M. Seymour, Programme Co-ordinator, 22 Devonshire Place, London W1N 1PD, England.

1983-

Fédération Dentaire Internationale, 71st Annual World Dental Congress, Tokyo, Japan, November 14-20, 1983. Contact: Japan Dental Association, 1-20, Kudan-Kita 4-chome, Chiyoda-ku, Tokyo 102, Japan.

Fédération Dentaire Internationale, 72nd Annual World Dental Congress, Helsinki, Finland, August-September, 1984.

Future meetings of the ACFD AFDC are scheduled to take place in Halifax (1982), Dalhousie: Edmonton (1983), University of Alberta; and Winnipeg (1984). University of Manitoba.

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ALBERTA — Calgary. Associate required for busy dental office. Contact: Dr. J.T. Boulton, 7 Parkdale Crescent N.W., Calgary, Alta. T2N 3T8. Phone: (403) 283-5596.

NORTHERN MANITOBA — Associate wanted. Very busy, modern family practice needs an associate. Three Cox units, one Ritter Commander II and one mobile cart. Large operatories. Opportunity to become partners or buy practice. Reply to CDA Box Number 2082.

MANITOBA — Wanted: Associate in family practice. Busy northern city, pleasant working conditions. Generous remuneration. For further details contact: Dr. P.A. Sheehan, 17-18 Westwood Shopping Centre, Thompson, Man. R8N 0C6. Phone: (204) 677-4526 (business) or 677-3926 (residence).

MANITOBA — Associate for established practice in St. Boniface. Excellent opportunity for future. This is an immediate opening. Reply to CDA Box Number 2094.

ONTARIO — Associate required. Dentist with some experience required to develop mainly paedodontic general and preventive side of well established dental office in Owen Sound. Reply to CDA Box Number 2091.

ONTARIO — Oral maxillofacial surgeon, associate wanted in Toronto, leading to partnership. Please reply to CDA Box Number 2076.

ONTARIO — Toronto. Associate required to take over pleasant, active, well-established general practice for one year. Reply to CDA Box Number 2093.

NOVA SCOTIA — Associateship in modern group practice in Halifax. Available June 1, 1982. Contact: Dr. A.E. MacLeod, Medical Arts Dental Group, 5880 Spring Garden Road, Halifax, N.S. B3H 1Y1. Phone: (902) 425-6800.

ASSOCIATE WANTED — to manage new satellite general practice. Established practices can maintain high gross while new practice develops. Reply to CDA Box Number 2084.

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Opportunities Available

BRITISH COLUMBIA — Vancouver. Pedodontist needed in busy specialty practice. Full time position, available immediately. Please write to CDA Box Number 2083.

UNIVERSITY OF SASKATCHEWAN — College of Dentistry. A vacancy exists for a full-time faculty member in the Divisions of Operative Dentistry and Biomaterials Sciences, Department of Restorative and Prosthetic Dentistry, College of Dentistry, University of Saskatchewan. Graduate qualification at the Masters level in a related discipline and/or teaching and practice experience in restorative dentistry preferred. Duties include teaching preclinical and clinical operative dentistry, co-ordinating teaching and research in dental materials science, and applied research and publication related to clinical disciplines. Consulting and practice privileges to a maximum of two half days per week are permitted, either on or off base. An Intramural Practice Unit is provided for faculty who wish to utilize on base facilities. Salary and rank commensurate with qualifications and experience. Interested applicants should send curriculum vitae and related documentation with at least three names for reference purposes by January 31 to: Dean E.R. Ambrose, College of Dentistry, University of Saskatchewan, Saskatoon, Sask. S7N 0W0.

MANITOBA — Winnipeg. Oral surgeon certified to practise in Manitoba required for a busy practice. Object partnership. Please submit qualifications and curriculum vitae and recent photo to CDA Box Number 2086.

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*Yankell, S.L., U Pa Sch Dent Med, Phila, Penn IADR Journal of Dental Research, Jan 79, Vol. 58, P. 239, Abstr 585
Nygaard-Østby, P., et al, Jordan as Oslo, Norway; U Pa Sch Dent Med, Phila, Penn.
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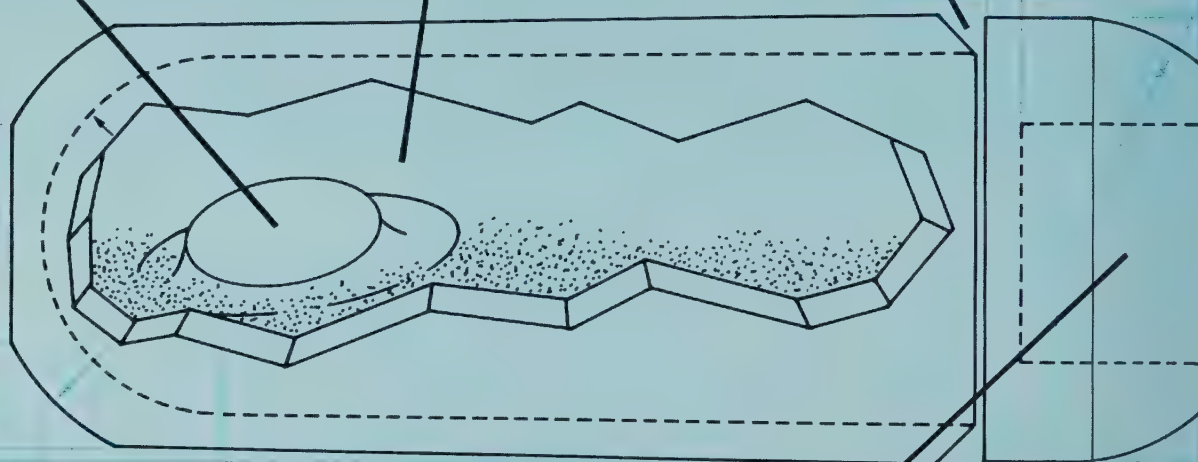
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Serving Indians on reserves presents very different situations. Dr. W.R. Bedford discusses some of these differences.

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"...this publication cannot be recommended for purchase as a source of information for the dental practitioner. It does have merit as a guide for patients..." — Dr. Dennis B. Gilboe

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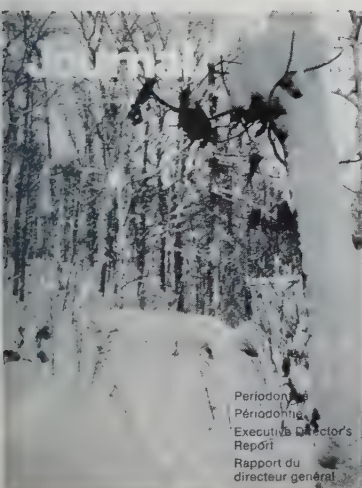
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Journal

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1982

Éditorial

- 70 Le Dr Michel Carvonis, président du Mois national de la santé dentaire, incite les membres de la profession à participer à ces activités qui se déroulent au mois d'avril et à répandre le message de la santé dentaire.

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- 106 **Nomination du Dr Dungy**
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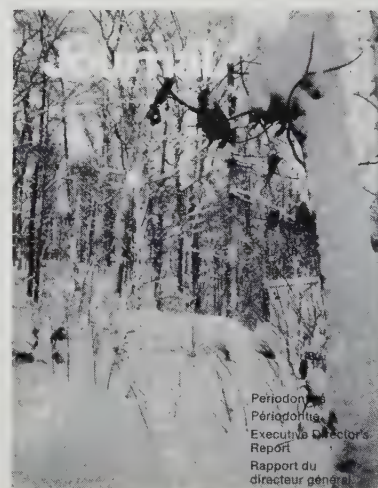
Terre-Neuve
Dr Robert Sexton

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Périodontie

Rapport du
directeur
général

National Dental Health Month

Health, especially dental health, is not a priority for Canadians. They'll spend money on sports, luxury items and vacations, but groan when it comes to expenditures for good health. Oral hygiene is not first on their list of priorities.

That's why, along with cancer, heart and lung disease, dental disease is a major health problem in Canada. That's the reason for our annual National Dental Health Month campaign.

National Dental Health Month is a national campaign run across Canada by YOU, the dentists, in an effort to spread the message of dental health to all Canadians. The campaign is run in April, but its effects should be felt year-round.

We want Canadians to be aware that dental disease does affect their health. It does not threaten your life. But it is irreversible, insidious and can ruin your health, happiness and appearance.

The statistics are alarming. Seventeen per cent of Canadians between the ages of three and 18 have never been to a dentist; close to 68 per cent of Canadian children suffer from inflammation of the gums and by the time they reach school age, about 65 per cent have tooth decay. At least 25 per cent of all Canadians over 19 have lost all their natural teeth, a figure which doubles for those 60 and older.

In spite of this, Canadians persist in ignoring the state of their dental health. Federal and provincial health departments are being approached to assist the CDA in promoting the prevention of this disease. That's why it's especially important to organize the National Dental Health Month campaign in April and to maintain dental health's high profile year-round.

The success of the annual campaign depends entirely on YOUR involvement in spreading the message of dental health.

This year's slogan, "Smile Canada", is very appropriate. Let's all band together to promote the common cause of

dental health for everyone. Let's make Canadians aware there is something to smile about. YOU have the tools to do it.

Planning kits to assist regional and provincial organizers have been produced by CDA. They contain valuable pointers on how to run a successful campaign: publicity tips, suggestions for speakers, program planning ideas, newspaper articles for distribution to the print media, speeches and dental health activities for children.

The annual poster contest means children can become actively involved in National Dental Health Month in a big way. The kits also suggest other activity ideas for school-age children.

Once again, the popular Shari Lewis television announcements featuring Lamb Chop, the puppet, will be used. CDA has provided each province with a master tape including the names of the provincial and Canadian dental associations. Tapes will also be sent to Canada's national television network. A French announcement featuring Captain Cosmos will be aired on private networks.

Radio announcements have been sent to all stations in the country for use in April and the rest of the year.

McDonald's and Holiday Inns have agreed to help promote National Dental Health Month through announcements on their tray liners and outdoor signboards.

The use of promotional material such as posters and decals in all dental offices can make a significant difference in Canadian attitudes towards dental health.

The active support of each dentist at the grassroots level, coupled with the efforts by CDA and provincial associations and local societies can make National Dental Health Month a tremendous success.

Let's concentrate on making April the "Smile Canada" month of the year, and keep Canada smiling all year long.

*Dr. Michel Carvonis
Chairman, NDHM*

Le Mois national de la santé dentaire

Les Canadiens ne considèrent pas la santé, la santé dentaire surtout, comme une priorité. Ils ont volontiers des sous pour les sports, les vacances et les articles de luxe, mais protestent dès qu'il s'agit d'effectuer des dépenses pour se conserver en bonne santé. Et bien entendu, l'hygiène buccale est leur moindre souci.

Voilà qui explique pourquoi les maladies dentaires, tout comme le cancer et les maladies cardiaques et pulmonaires, constituent un des principaux problèmes de santé au Canada. Et voilà pourquoi aussi a lieu chaque année la campagne du Mois national de la santé dentaire.

Cette campagne est menée à travers le Canada par VOUS, les dentistes, afin de sensibiliser tous les Canadiens à la santé dentaire. Bien qu'elle ait lieu en avril, il va de soi que le message qu'elle veut répandre est valable pour toute l'année.

Nous voulons que les Canadiens sachent que les maladies dentaires affectent leur santé en général. Certes, elles ne représentent aucun danger mortel, mais outre qu'elles sont irréversibles et pernicieuses, elles peuvent ruiner la santé, l'apparence et même le bonheur de leurs victimes.

Les statistiques sont alarmantes. On estime que 17 pour cent de Canadiens âgés de trois à 18 ans n'ont jamais visité le dentiste, que 68 pour cent des enfants Canadiens souffrent d'inflammation aux gencives et que 68 pour cent ont des caries au moment d'atteindre l'âge scolaire. Au moins 25 pour cent des Canadiens de plus de 19 ans ont perdu toutes leurs dents naturelles et ce chiffre double chez les plus de 60 ans.

Malgré ces faits, les Canadiens continuent à faire fi de leur santé dentaire. L'ADC a entrepris des démarches auprès des ministres de la santé fédéral et provinciaux afin d'obtenir de l'aide pour corriger cette attitude. Aussi importe-t-il tout particulièrement que vous participiez à la campagne du Mois national de la santé dentaire, en avril, et que, toute l'année durant, vous fassiez valoir les avantages de posséder des dents saines.

Le succès de cette campagne annuelle dépend entièrement de VOTRE participation pour répandre le message d'un bonne santé dentaire.

Le thème de la campagne: "Sourions" semble particulièrement approprié. Conjuguons donc nos efforts pour promouvoir une bonne santé pour tous. Faisons en sorte que les Canadiens sachent combien il est important d'avoir un sourire qui soit sain. VOUS avez tout en main pour les en convaincre.

L'ADC a rassemblé du matériel pour aider les organisateurs provinciaux et régionaux à préparer la campagne de manière à ce qu'elle soit un succès. Il s'agit de conseils précieux touchant la publicité, de recommandations pour les conférences, d'idées pour établir des programmes, d'articles pour distribuer à la presse, de discours et de suggestions pour organiser, à l'intention des enfants, des activités reliées à la santé dentaire.

Pour les enfants justement, l'ADC tiendra encore cette année le concours d'affiches. À en juger par le succès des années précédentes, ce concours est une façon pratique d'intéresser les enfants au Mois national de la santé dentaire et de les y faire participer activement. Le matériel préparé par l'ADC contient également d'autres idées pour les écoliers.

Une fois de plus, les annonces télévisées feront appel aux talents de Shari Lewis et de sa marionnette Lamb chop. Pour les réseaux privés français, on a prévu des annonces mettant en vedette le Capitaine Cosmos. L'ADC a remis à chaque province une bande indiquant les noms des associations dentaires nationale et provinciales. Elle enverra également des bandes aux réseaux nationaux de la télévision canadienne.

L'ADC a également fait parvenir aux postes radiophoniques des messages publicitaires qu'ils pourront utiliser en avril et toute l'année.

Les restaurants MacDonald et les hôtels Holiday Inn ont accepté de promouvoir le Mois national de la santé dentaire en affichant des annonces sur les distributeurs de plateaux et les panneaux d'affichage.

Par ailleurs, on invite les dentistes à mettre des affiches et des collants dans leur cabinet. Un simple rappel suffit parfois pour amener les gens à prendre soin de leurs dents.

Afin de faire du Mois national de la santé dentaire une campagne fructueuse, nous demandons à chaque dentiste d'y prendre une part active et d'appuyer les efforts de l'ADC, des associations provinciales et des sociétés locales.

En avril, qu'on entende partout: "Sourions" et que, toute l'année durant, on apprenne aux gens à afficher fièrement un sourire sain.

*le Dr Michel Carvonis
Le président du MNSD*

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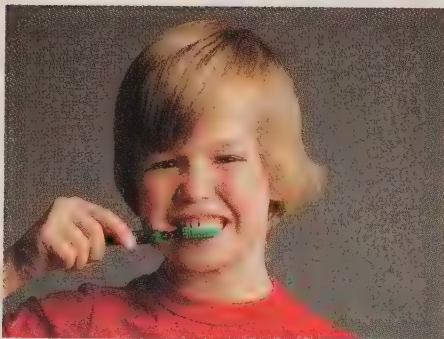
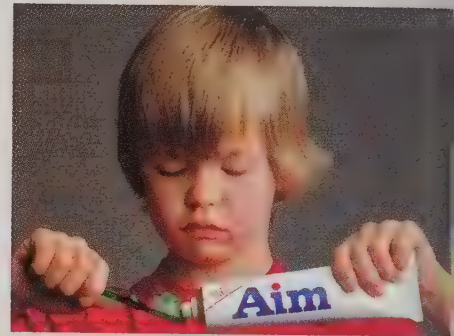
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BOB LEVOY

Bob Levoy, Speaker

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He holds three college degrees in business and professional fields and is the author of two books: "The \$100,000 Practice and How to Build It" and "The Successful Professional Practice"

He has also written over 300 articles including many for *Dental Economics* for which he is a columnist.

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- The **Performance Audit**: The Key to Seeing Yourself — As Others Do
- The **Boredom Factor** — and What To Do
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TRUBYTE



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Budget attacked

The Honourable Allan J. MacEachen,
Deputy Prime Minister,
Minister of Finance.

Dear Mr. Minister

The Canadian Dental Association is deeply concerned that your November 12 budget proposes to tax premiums for dental insurance paid by employers.

This tax application is potentially very injurious to the oral health of Canadians who now may drop this health benefit plan, in view of the existing difficult economic conditions. Approximately 5.5 million Canadians carry dental insurance.

One of the major reasons people do not go to the dentist on a regular basis, according to recent studies, is that they self-diagnose their oral condition and determine they do not suffer dental disease. The fact is that susceptibility to dental disease is universal.

The major thrust of our organization's effort to reduce dental cost is through the promotion of the benefits of preventive dental care. Insurance carriers in turn are committed to prevent dental disease as a means of cost containment. In fact, many dental plans already waive co-insurance and deductions in consideration of preventive treatment.

As explained earlier, the risk of dental disease is universal. Dental insurance is designed to assist in the payment of regular necessary expenses. However, dental insurance is only affordable when it is marketable to large groups. If dental premiums are to be taxed, our concern is that the numbers involved in dental insurance plans will drop, premiums will increase, and this will result in a reduction in the number of people with access to preventive dental care and at the same time sacrifice the very cornerstone of modern dental treatment.

Until the public perceives the enormous risk of dental disease, any

proposal designed to potentially reduce the availability of dental insurance plans and discourage the public from seeking regular dental care can have serious effects on the health of the Canadian public.

Good dental health is important and when promoted and funded by the private sector is much more preferable to using public funds. Continuous growth in this private sector may finally place the government in a position to help that diminished segment of the public without private plans to meet their dental needs.

We fully recognize that yours is not an easy task; however, I would urge you to take a hard look at the impact of imposing this proposed tax on an employer-paid dental plan premium.

*D.E. Williams, D.D.S.,
President*

*c.c. Honourable Monique Bégin,
Minister,
Health and Welfare Canada*

editor's note

The following letter was also sent to Finance Minister MacEachen. Similar letters are encouraged.

Dear Mr. MacEachen,

The booklet entitled "The Budget in More Detail" was forwarded to me by my Federal M.P., and I studied it in detail with great interest.

Although one cannot argue with the basic policy objectives outlined on page 29, there is much room for discussion on the methods by which you propose to achieve these objectives. Quite obviously a comprehensive treatise would be required to discuss the proposed changes point by point, and I am not qualified nor prepared to produce such a document, and doubt that you would have the time to read it if indeed I did.

Therefore, I shall confine my remarks to one subject which I feel I understand thoroughly, and which, it seems to me, has gone largely unnoticed elsewhere. I refer to the changes proposed in taxation of special forms of employee remunera-

tion, whereby employer contributions to dental insurance plans will become taxable in the hands of employees as income from employment.

Mr. MacEachen I sincerely believe this to be a most regressive step, particularly at a time when our Provincial Government is making every effort to encourage the flow of private capital into the health care field.

Notwithstanding the merits of universal medicare you, and your fellow Ministers of Finances in the Provinces are acutely aware of the huge burden medical and hospital care places on the Nation's financial resources. All of you also realize full well how difficult it is to effect economies within the present system, and to reduce the number of available benefits once they have been established.

However, Mr. MacEachen, let us not confuse medical care with dental care. Government funding of medical care is a very emotional issue for the financial effects of major illness for individuals can be catastrophic. Dental care, on the other hand, is considered by most people to be, at best, a necessary evil; and because dental care is largely elective in nature costs can be controlled by mutual agreement between patients and their dentists.

The existence of employer sponsored third party payment plans (dental insurance) has defused the issue of Denticare, the cost of which we, as a nation, simply cannot afford.

Your proposal to make employee contributions to dental insurance plans taxable in the hands of the employees will, I'm convinced, have the following adverse effects:

1. Upgrading of the benefits provided in existing plans will cease immediately;
2. No new plans will be introduced;
3. Some existing plans may be abandoned entirely;
4. The demand for government sponsored dental care programs, in the absence of the

privately funded plans, will increase. (The political pressures of this demand should not be underestimated.);

and, 5. The gradual upgrading of the Nation's dental health that has taken place to date will be severely and negatively affected.

It seems to me Mr. MacEachen we have here a classic case of private enterprise doing its job very well. People who are dentally aware (and we are talking about the average Canadian — the middle and lower middle income earners, by and large) are pleased with programs in existence. The representatives who negotiate the benefit packages for them like what they can do for their people. The insurance carriers are able to provide a service and realize a profit. (They are able to do this because participation by beneficiaries is probably only a little more than 50 per cent. You realize, Mr. MacEachen, that some people, regardless of their income level, or the insurance benefits available to them, simply just will not seek dental care. If you tax the employee benefit you will tax some individuals who will never take advantage of this benefit; but whose very non-participation helps spread the cost of dental care and makes the insurance plans economically viable.)

Finally Mr. MacEachen I respectfully submit that the revenues accruing to the Federal Government by taxing these contributions as income will be minimal. The damage to the dental health of the Nation will, I believe, far exceed the value of any financial gain to the Treasury.

Mr. MacEachen, I would like to thank you for reading this letter. I assure you I tried to keep it brief, but it was difficult. I only hope that you will give this matter serious consideration, and respectfully request that you reverse the decision made in your budget regarding taxation of these very practical and useful benefits.

*Dr. James Sim
St. Catharines, Ont.*

*cc: The Honourable Joe Clark —
Leader of the Opposition
The Honourable Edward Broad-
bent — Leader of the New
Democratic Party
The Honourable William Davis
— Premier of the Province of
Ontario
The Honourable Frank Miller —
Treasurer of the Province of
Ontario
The Honourable Robert Welch —
Deputy Premier and Minister of
Energy of the Province of Ontario
The Honourable Bette Stephen-
son — Minister of Education of
the Province of Ontario
The Honourable Dennis R. Tim-
brell — Minister of Health of the
Province of Ontario
The Honourable Joe Reid —
Member of Parliament for St.
Catharines
The Honourable Gilbert Parent
— Member of Parliament for
Welland
Dr. D.E. Williams — President of
the Canadian Dental Association
Dr. R.R. Schiewe — President of
the Ontario Dental Association
Dr. R. Hicks — Chairman of the
Taxation Committee of the Ca-
nadian Dental Association*

Le budget controversé

L'Honorable Allan J. MacEachen
Premier Ministre suppléant
Ministre des Finances.

Monsieur le Ministre,

L'Association dentaire canadienne s'inquiète grandement du fait que votre budget du 12 novembre dernier propose de lever un impôt sur les primes d'assurance dentaire que paient les salariés.

Il est fort possible que cet impôt soit très préjudiciable à la santé buccale des Canadiens qui voudront déclinant renoncer à cette assurance-maladie en raison des présentes diffi-

cultés économiques. Environ cinq millions et demi de Canadiens détiennent des polices d'assurance dentaire.

Selon des études récentes, si les gens ne visitent pas le dentiste régulièrement, c'est simplement parce qu'ils établissent eux-mêmes leur propre diagnostic de santé buccale, déterminant ainsi qu'ils ne requièrent aucun soin dentaire. Cependant, les faits attestent que tous les hommes sont sujets à souffrir des dents.

Notre organisation concentre ses plus grands efforts à réduire les frais dentaires en favorisant la dentisterie préventive. De leur côté également, les assureurs s'engagent à faire valoir les soins dentaires de prévention afin de maintenir les prix aussi bas que possible. De fait, plusieurs régimes d'assurance dentaire renoncent déjà à la coassurance et aux déductions en faveur des soins préventifs.

Comme nous le disions plus haut, tous sont sujets aux maladies dentaires. Les régimes d'assurance sont conçus précisément pour aider à défrayer les dépenses nécessaires faites régulièrement pour soigner ces maladies. Toutefois, l'assurance dentaire est rentable seulement lorsqu'on peut la vendre à des groupes nombreux. Si les primes deviennent imposables, nous craignons que le nombre des assurés dentaires diminuera et que les primes augmenteront. Il s'ensuivra que le nombre de personnes ayant droit à des soins dentaires préventifs baissera et, en même temps, que sera détruite la pierre angulaire sur laquelle repose tout l'édifice de la dentisterie moderne.

Jusqu'à ce que le public devienne conscient du grave danger que représentent les maladies dentaires, toute proposition visant à rendre moins disponibles les régimes d'assurance dentaire et à dissuader les gens de visiter régulièrement le dentiste, pourra avoir des conséquences désastreuses sur la santé des Canadiens.

La bonne santé dentaire constitue un facteur important qu'il est préférable de voir encouragé et subventionné par le secteur privé plutôt que par les deniers publics. S'il est permis au secteur privé de connaître un essor dans

ce domaine, le gouvernement pourra peut-être finalement être en mesure d'aider cette faible part du public qui ne bénéficie d'aucun régime privé pour défrayer les coûts des soins dentaires.

Nous reconnaissons volontiers que votre tâche est difficile. Cependant, je vous invite à considérer sérieusement les conséquences qui suivraient un impôt prélevé sur les primes d'assurance dentaire payées par les salariés.

Veuillez agréer, Monsieur le Ministre, l'expression de mes sentiments les plus distingués.

*Le président de l'A.D.C.
(D.E. Williams, d.d.s.)*

*c.c.: l'Honorable Ministre de Santé et
Bien-être social Canada,*

Retail Dentistry discussed

Doctors Druck and Jezdinsky are understandably against the concept of department store dentistry. (CDA Journal Nov., 1981). However, shop dentists are a natural result of too many graduates. Nobody likes being a dental store employee but presently there is a lack of dental opportunities.

If you halve the graduating number, dental shops will wither away from lack of staff.

Dr. J.T. Shilhan, Subury

The letter from Dr. Joseph Druck in your recent edition of J.C.D.A. invites comment. Like Dr. Druck I was taught by Dr. P.G. Anderson and Dr. J.D. Purvis. The reputation that Clinical Dentistry earned during the years these men were in charge of Operative Dentistry at the University of Toronto is a better testimony to their true character, abilities and personal qualities than any Dr. Druck or I could devise.

*Dr. P.C. Bradley, D.D.S.
Victoria, B.C.*

Thanks to Librarian

What a delightful surprise to open the package from the library, and find all the material xeroxed, in order, that I had requested.

My appreciation does not derive primarily from the material-though I will read it in due course, but from the fact that you took the trouble to search out the article in another library, and then painstakingly prepared it for me.

I just want to say thank you, and I congratulate the association for choosing you for the position. I hope that you and the C.D.A. have a long and happy relationship. It's a real booster to get that kind of service.

*Dr. D.C. Deedrick
Lacombe, Alta.*

CFDE Clarification

On behalf of my fellow Trustees I want to express sincere thanks for the splendid publicity you so frequently give the Canadian Fund for Dental Education in the pages of your fine Journal, e.g. in the November issue

you ran a full-page Fund advertisement in both English and French.

In the same issue under the heading "Board of Governors" on page 722 (lower right hand corner) is the following announcement:

CFDE

Dr. James A. Guest, Chairman, CFDE Board of Trustees, announced that the CFDE office will be moved to Ottawa no later than June 30, 1982.

I would like to point out that at the same time I also announced that the Board of Trustees would be meeting later in the year to reconsider this hastily made decision at our spring meeting.

I can now report that a meeting was held on October 26-27, 1981, with all 11 Trustees in attendance. Over a full day was spent considering the advantages and disadvantages of moving the Fund's office to Ottawa. It was finally decided by a majority vote that it would be in the profession's future best interest to have the Fund's office remain in Toronto. Perhaps I should add that previous CFDE Boards of Trustees came to the same decision in May 1975 and April 1976.

Again many thanks for all your help. It is greatly appreciated.

James A. Guest, D.D.S.

Chairman, Board of Trustees

Obituaries/Nécrologies

SMITH, HARRY LEROY: Died October 31, 1981. Practised in Windsor, Ont. from 1916 to 1972. Graduated from the Royal College of Dental Surgeons of Ontario, 1916.

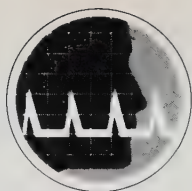
FUMERTON, AUBREY SCOTT: Died Oct. 29, 1981. Graduated University of Toronto 1922. Practised in Lethbridge, Alberta from 1922 to 1970. Survived by wife, daughter and son.

PORTIGAL, SAMUEL L.: Died Oct. 19, 1981. Graduated

University of Toronto 1929. Practised in Leader, Sask. and Calgary, Alta. from 1936 to 1979. Survived by four sons, one daughter and eight grandchildren.

ROBINSON, ALLEN CLAIR: Died Nov. 17, 1981. Graduated Toronto, 1949. Born in Colonsay, Saskatchewan.

AUDET, ROGER: Décédé le 26 septembre, 1981. Gradué l'Université de Montréal, 1958.



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How to — perform an effective, straight-forward 1-2-3 technique for the elimination of prematurities by grinding. This occlusal stabilization is effective in patients with natural teeth or a prosthetic occlusion.

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How to — eliminate the mystique and mystery from full mouth reconstruction which will allow you to treat these cases with confidence. When you electronically accomplished muscle relaxation with the Myo-monitor, followed by automated maxillo-mandibular registration with the Myo-monitor, you take away all guesswork and provide an uneventful, muscularly quiet physiologic environment for the finished reconstruction.

Complete and partial dentures The New World of Electronically Automated Border Molded Impressions and Registration of Occlusion

How to — bring new standards of retention, comfort and renewed function to edentulous or partially edentulous patients. Of great significance; frustrating, unscheduled, post-insertion adjustment visits are drastically reduced, thus reducing the annoying non-profitable segment of prosthodontics from your practice.

Orthodontics — focus on function

How to — simplify orthodontic procedures by treating to the electronically determined, muscularly-oriented position of the mandible to the skull. In many cases, the change in skeletal relation after muscle relaxation makes available the space into which to move teeth, without the indication for multiple extractions.

Electronically automated muscle relaxation followed by registration of mandibular position achieves three-dimensional correction of the skeletal malrelation, often instantaneously altering the basic orthodontic classification. For example, a significant increase in vertical dimension changes a seeming Class III to a realistic Class I. Methods and appliances for orthodontically increasing vertical dimension are greatly expanding the functional scope of orthodontic treatment, with a marked increase in adult orthodontics. The functional objective of the application of biomedical electronics to orthodontic diagnosis and treatment is the establishment of a relaxed neuromuscular environment for the finished case.

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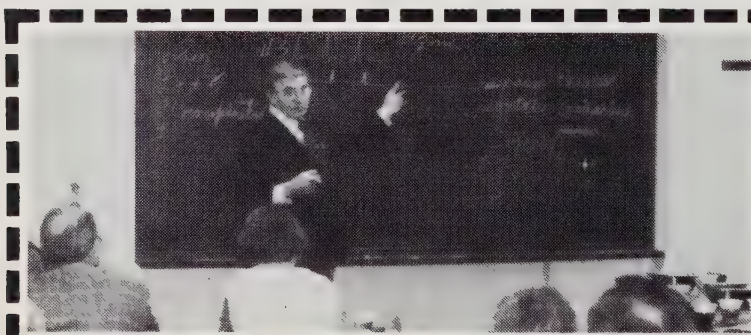
Philadelphia, PA	Feb. 4-5
San Diego, CA	Feb. 12-13
New Orleans, LA	March 12-13
Boston, MA	March 11-12
Houston, TX	March 18-19
Denver, CO	March 25-26
Pittsburgh, PA	April 1-2
San Francisco, CA	April 16-17
University of West Virginia	
Morgantown, WV	April 30-May 1
Knoxville, TN	May 6-7
Washington, DC	May 13-14
Indianapolis, IN	May 13-14
Ottawa, CAN	May 20-21
Portland, OR	June 10-11
Las Vegas, NV	June 11-12
Edmonton, CAN	June 17-18
Montreal, CAN	June 17-18
Monterey, CA	July 16-17
Regina, CAN	Sept. 2-3
Salt Lake City, UT	Sept. 17-18
Atlanta, GA	Sept. 23-24
U.C.L.A., Los Angeles, CA	Sept. 24-25
New York, NY	Sept. 30-Oct. 1
Omaha, NE	Oct. 7-8
Phoenix, AZ	Dec. 3-4

STEP II — Advance Seminars (5 days) — Seattle

February 1 thru 5
April 12 thru 16
June 28 thru July 2
August 9 thru 13
Oct. 18 thru 22

STEP III — Special Myo-tronic Courses — Seattle

TMJ Seminar — April 23-24
Prosthodontic Workshop — July 22-23-24
Orthodontic Seminar/Workshop — Aug. 23-24
EMG Training Courses — Seattle
January 14-15
April 1-2
September 9-10
January 13-14, 1983



Continuing Education Accreditation: AGD 8 maint. cr/day, CDA 7 cr/day. For Seminar Outline, brochure, fees and other details, please select location above, complete and mail.

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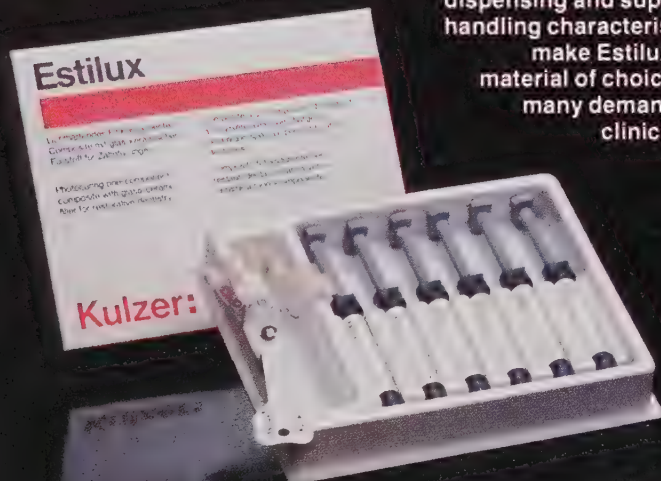
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*A red light exit window which enables units sold prior to January 1981, to cure up to 4.5mm. is available.



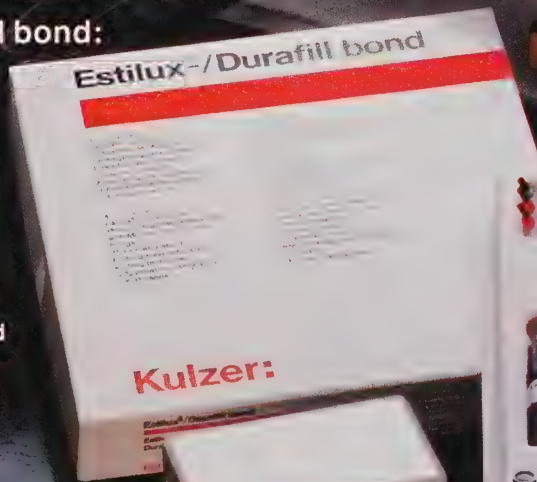
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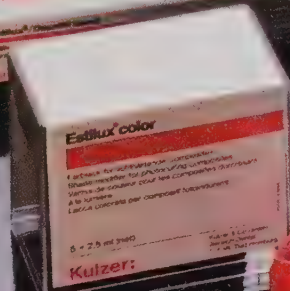
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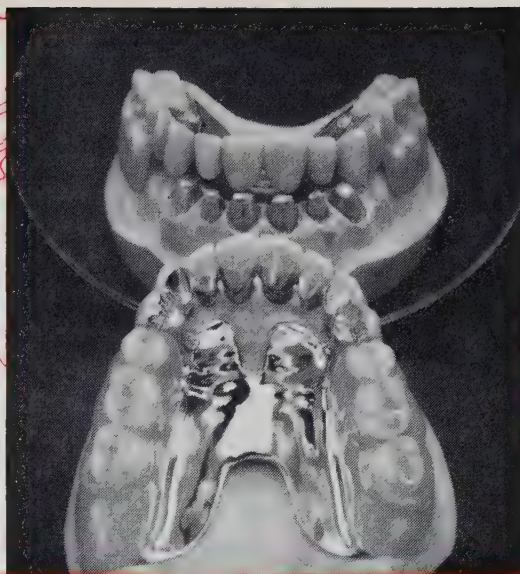
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386 Dorchester, Sud

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Executive Director's Report

The Canadian Dental Association Executive Council met on November 13-14, 1981 in Ottawa. The following highlights have been prepared for your information.

CDSPI

Executive Council reviewed and approved the audit of the Canadian Dentists Insurance Plans from 1978 through to December, 1980.

The firm of Shoemaker/Deslauriers has been appointed auditors of the plans for the calendar year 1981.

CDSPI is looking into the possibility of making malpractice insurance available, and Provincial Associations will be provided with additional information as soon as it is available.

CDA Policy of Expense Reimbursement

The present policy of expense reimbursement was reviewed by the Executive Council, and a maximum allowance of \$45.00 per day was set for meal allowance. Directives were more clearly defined using "reasonableness" as a yardstick.

Staff Dental Plan

CDA has requested CDSPI to look into the development of a Staff Dental Plan to replace the current method of coverage which is self-funded. This plan will be put into effect on January 1, 1982 and offered to Provincial Associations. CDSPI is currently looking at improving the pension plan benefit to replace the existing plan.

Government Affairs

— *Senior Consultant — Dentistry — Health & Welfare Canada*

CDA is represented by the Executive Director on the selection committee for the staffing of the position of Senior Consultant — Dentistry, Health & Welfare Canada. Interviews

are scheduled this month and an announcement will be forthcoming.

— *Working Group on the Practice of Dental Hygiene — Health & Welfare*

The CDA has been advised of the formation of a Working Group on the Practice of Dental Hygiene by Health & Welfare. The terms of reference and the composition of this group were reviewed by the Executive Council. In the opinion of the Executive, the terms of reference are ambiguous and there exists a definite imbalance in the structure of the group, i.e. eight hygienists, three dentists. A more representative committee is desirable and the provincial associations will be encouraged to make their views known to the Minister of Health. A letter will be forwarded by the CDA to the Department expressing our concern.

— *Dental Therapists*

Dr. Williams and the Executive Director met with the Deputy Minister to discuss the relocation of the School of Dental Therapy and the related concerns of dental therapists in underserved areas. Once again, the Deputy Minister was informed of the Association's offer to supply dental manpower through the provincial associations' liaison with the regional directors. We were informed that the federal regional directors were given, as a priority, the development of greater co-operation to enable dentists to participate more fully in the delivery of services to these areas.

The therapy school is presently closed and members of the teaching staff are engaged in field work. No decision has been made on the relocation of the school. CDA has continued to express the position of the provincial dental associations on this matter and a decision is expected shortly.

The President will meet with representatives of the National Indian Brotherhood to inform them of our position relative to improved dental manpower and our concerns about ensuring comprehensive care to all Canadians.

— *Taxation Committee*

The Executive Council reviewed the report of the Taxation Committee and a letter outlining a summary of the Federal Budget will be distributed to the membership. The Joint Professional Committee (studying improvement in pre-tax retirement savings opportunities) has held two meetings and is presently developing terms of reference. Efforts are being made to involve the Canadian Bar Association, Canadian Medical Association and the Canadian Institute of Chartered Accountants on a share basis at \$2,500 per association to ensure effectiveness in our approach to tax relief in RRSP for professionals.

Membership

The CDA membership campaign, chaired by Dr. Utas, is well underway with the mailing of renewal notices to Ontario and Quebec on October 26th. Follow-up notices will be forwarded on December 1st, and an analysis of participation will be made in early January to determine subsequent action.

Excellent co-operation has been offered by Ontario and Quebec, and Drs. Bradley Holmes and Jean Laporte will assist in the development of a telephone campaign in their respective provinces. The Ontario Dental Association has also offered assistance through their Journal, and Quebec will be asked to provide support.

Life Memberships

The following Life Memberships were approved by Executive Council:

McIvor, W.A.	— British Columbia
Folkins, J.A.	British Columbia
Elliott, W.L.	British Columbia
Shields, J.A.M.	Alberta
Gordon, D.C.	Nova Scotia

Certificates of Merit

Certificates of Merit were approved as follows:

Governors:

E.F. Allison	(Alberta)
R.F. Evans	(Ontario)
A.J. Harris	(Ontario)
G. Maranda	(Quebec)
L. Tomkins	(Student Rep.)

Councils/Committees:

P. Belisle	(Health Care)
G.A. Freeze	(Education)
R. Headley	(1981 Convention)
W. Heaslip	(Constitution & By-Laws)
A.E. Hoffman	(Hospital Services)
F.A. Irwin	(D.V.A. Representative)
C.L.B. Lavelle	(Education)
J.W. MacKay	(Executive)
A.E. MacLeod	(Information Services)
J.H.P. Main	(Hospital Services)
R.J. Sexton	(Health Care)

1981 Convention:

Mrs. G. Headley
B.H. Weeks
G.P. Greeves
L.G. Dugal
R.D. Odland
E.T.M. Geraldi
J.A. Derbyshire
N.S. Misura
R.F. Valentini

† Deceased

Editorial Board

Dr. A.E. MacLeod, Halifax, was re-appointed as Chairman of the Editorial Board. Dr. A.D. Sparrow, Calgary, was also appointed to the Board replacing Dr. Clyde Covit who served for one year following his term as President of CDA.

Peer Review

Interest has been expressed by members of the Newfoundland Dental Association in organizing a workshop on peer review. The CDA Library/Resource Centre has already acquired information on this topic and it will be made available to all corporate members. Provincial Associations will be asked, in turn, to supply any available information to the CDA Library, and to indicate if a workshop should be held in 1982.

Annual Convention

The Executive Council received the financial report of the Convention Committee, which outlined a very successful event. Council passed a resolution expressing sincere congratu-

tulations to the Calgary Dental Society for their outstanding efforts in organizing a most successful 1981 Convention.

Discussions were held on the possibility of holding the CDA Conventions in Ottawa more often, i.e. every two or three years, and in alternate years working conjointly with a provincial/regional association. This conjoint method is being utilized for 1982 in Toronto and the same possibilities are being investigated for the 1984 Convention in Montreal.

FDI

Dr. Utas presented a report on the FDI Congress in Rio de Janeiro. His report was published in the CDA Journal as part of a series of articles also prepared by Dr. G.S. Beagrie and Brig.-Gen. W.R. Thompson.

The FDI Membership campaign was held in January, and membership will be encouraged through the Journal and by the mailing of renewal invoices to present members of FDI. The fees for supporting membership in 1982 are unchanged at \$35/member and \$60/member with the International Journal.

CFDE

The Executive Director, who also serves as a trustee of the Board of CFDE, reported on a special meeting of the Board which was called to review the relocation of the CFDE to Ottawa. Mr. Drouin, on behalf of the Executive Council, offered office accommodation at CDA headquarters to the Fund, co-incident with the retirement of its Executive Director on June 31, 1982. This proposal would enabled the Fund to economize 50 per cent of its present administrative expenses, making use of the CDA offices and personnel. Financial details would be the responsibility of the CDA, as required by the Deed of Trust of the Fund. This is similar to the arrangement which existed before CDA relocated to Ottawa in 1977. It was however, the decision of the CFDE Board of Trustees *not* to relocate to Ottawa primarily for reasons

of maintaining relationships with the dental industries. Mr. Drouin indicated that fund-raising activities are carried out successfully by many other charitable organizations throughout Canada which are not located in Toronto.

The Executive Council expressed concern about the decision of the CFDE Board of Trustees.

CDHA — Independent Practice

The Executive Council reviewed correspondence from the CDHA. Council was of the opinion that the Provincial Dental Acts legislate the duties of dental hygienists in the practice of dentistry. CDA is prepared to hold discussions with the CDHA, once they have expressed their position regarding the matter of independent practice.

The Council on Health Care will be asked to prepare a report on the role of the dental hygienist in a dental practice. It was noted that the resolution passed at the Board of Governors meeting in August, 1981, excluding auxiliaries from attendance at CDA meetings will require an amendment to the CDA By-Laws. This resolution will be presented for recommended By-Law change at the Board meeting in March, 1982. For the interim period, the auxiliaries continue to be members of the CDA Councils and will be permitted to attend.

Membership — Specialty Sections

CDA By-Laws require that to be a member of a Specialty Section, a dentist must be a member of the CDA. However, in Ontario and Quebec, this is not always the case. Following a meeting with representatives of the Specialty Sections on August 30th, a moratorium has been placed on this requirement in order to review the By-Laws to determine whether they are realistic and practical.

Accreditation

A moratorium has been placed on the accreditation of dental auxiliary schools in the province of Quebec. This is to enable further discussion with the QDSA on the level of accreditation in schools where unacceptable

In the News

procedures are being taught, over and above those approved by the CDA.

Canadian Standards Association

The Council on Dental Materials and Devices has recently reviewed a preliminary report from the Canadian Standards Association towards a certification program to be sponsored conjointly between the CDA and the CSA. This program will look at standardizing dental materials throughout Canada and will be self-supporting. More information will be made available following the next meeting of Council.

Executive Council was informed that H.E. Drouin has been appointed as a member of the CSA Steering Committee on Health Care Technology. This appointment is in addition to several members of the Council on Dental Materials and Devices which make up the CSA Technical Committee on Dentistry.

NDEB

Executive Council received infor-

mation regarding the possibility of the NDEB conducting an in-depth study of the CDA accreditation program. It was indicated that discussion should be held with the Council on Education. Additional information will be obtained from the NDEB, which will be encouraged to inform CDA if any concerns exist regarding the accreditations process.

Media Workshop

The Executive participated in a two-day Media Workshop prior to its business meeting in Ottawa. This seminar was evaluated and considered as most beneficial to members of Council who are called upon from time to time to represent the Association to the media. Consideration will be given to expanding this type of workshop and making the course available to other associations or interested groups within the profession.

Future Meeting Dates

The following meeting dates have been set:

Feb. 12-13/82

— Pre-Board Executive Council —
Ottawa

Mar. 18/82

— CEO's & President's Meeting —
Ottawa (*if necessary*)

Mar. 19-20/82

— March Interim Board Meeting —
Ottawa

May 12-13/82

— Executive Council in Toronto
following ODA/CDA Convention
Sept. 23/82

— Specialty Sections Meeting—
Ottawa Day prior to Annual Board
Meeting

Sept. 24-25/82

— Annual Board of Governors
Meeting — Ottawa

Closing Remarks

If further information is required regarding any of the aforementioned items, please feel free to contact me.

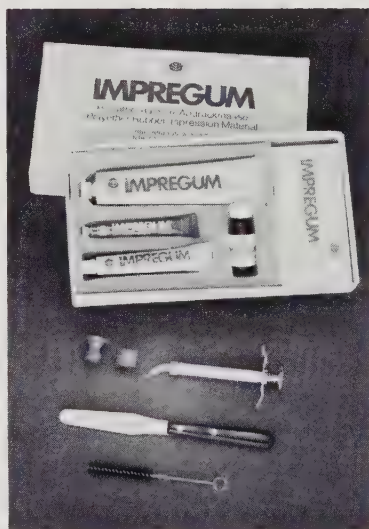
*Hubert Drouin
Executive Director*

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New Newfoundland Executive



The Newfoundland Dental Association elected its new executive recently. Left to right are: Dr. Robin Gamble, President (St. John's); Dr. Donald Williams, President CDA; Dr. Toby Gushue, Secretary NDA (St. John's); Dr. Gerry McFarlane, Past President NDA (Grand Falls); Dr. Gary MacDonald, President NDA (St. John's); Dr. Dan Green, 2nd Vice President NDA (Placentia); and Mr. Hubert Drouin, Executive Director CDA. Missing from photo is Dr. Gordon Anthony, 1st Vice President (St. John's).

CDA Retirement Savings Plan

Unit values of the Canadian Dental Association's Retirement Savings Plan stood as follows on December 31, 1981.

<i>Common Stock Fund</i>	\$52.7617
<i>Fixed Income Fund</i>	\$26.1207
<i>Guaranteed Fund</i>	\$22.0234
<i>Balanced Fund</i>	\$11.9036

Total assets (market value) of the plan were \$30,846,789.

The previous month's figures, as of November 30, 1981, stood as fol-

lows:

<i>Common Stock Fund</i>	\$53.5704
<i>Fixed Income Fund</i>	\$26.4885
<i>Guaranteed Fund</i>	\$21.7421
<i>Balanced Fund</i>	\$12.3083

Total assets (market value) of the plan were \$31,536,598.

For further information write to: Canadian Dental Service Plans Inc., P.O. Box 7500, Station A, Toronto, Ontario M5K 1A0.

INTERIM BOARD OF GOVERNORS MEETING

The 1982 Interim Meeting of the Board of Governors of the Canadian Dental Association will be held on March 19-20, 1982, at the Four Seasons Hotel, Ottawa, commencing at 9:00 a.m. on March 19th.

RÉUNION INTERIMAIRE DU CONSEIL DES GOUVERNEURS

La prochaine réunion intérimaire du Conseil des gouverneurs de l'ADC aura lieu les 19 et 20 mars 1982 à l'hôtel Four Seasons à Ottawa. La rencontre commencera à 9h le 19 mars.

PLEASE NOTE

Registration forms for the CDA/ODA 1982 National Convention at the Sheraton Centre, Toronto, Ontario will be distributed by mail in February. Convention dates are May 9 — 12.

AVIS

Les formulaires d'inscription pour le congrès national 1982 de l'ADC/ODA, qui aura lieu au centre Sheraton de Toronto (Ontario), seront envoyés par la poste au mois de février. Le congrès se tiendra du 9 au 12 mai.

Régime d'épargne-retraite de l'ADC

Les valeurs respectives du Régime d'épargne-retraite de l'Association Dentaire Canadienne étaient les suivantes au 31 décembre 1981.

<i>Fonds d'actions ordinaires</i>	\$52.7617
<i>Fonds à revenu fixe</i>	\$26.1207
<i>Fonds garanti</i>	\$22.0234
<i>Fonds de placement</i>	\$11.9036

L'avoir total (valeur marchande) du régime s'élevait à \$30,846,789.

Au 30 novembre 1981, les chiffres du mois précédent étaient les

suivants:

<i>Fonds d'actions ordinaires</i>	\$53.5704
<i>Fonds à revenu fixe</i>	\$26.4885
<i>Fonds garanti équilibré</i>	\$21.7421
	\$12.3083

L'avoir total (valeur marchande) du régime s'élevait à \$31,536,598.

Pour obtenir tout renseignement supplémentaire, prière de s'adresser aux: Régimes des rentes et d'assurances subventionnés par l'ADC, P.O. Box 7500, Station A, Toronto, Ontario M5K 1A0.

A vaccine to eliminate caries?

A vaccine that may eliminate caries for a lifetime?

Sounds too good to be true.

Dental researchers and microbiologists in North America optimistically report that a vaccine which can effectively reduce the incidence of dental caries may be on the market in five years. The realists among them estimate it will take about 10 years.

The idea of an oral vaccine to immunize humans against caries has been around since at least 1930, Dr. John Stamm of the Department of Community Dentistry at McGill University said. But long before that, researchers were attracted to the idea of treating the Number One health problem in Canada.

Tooth decay isn't a modern disease.

From ancient to recent times, mankind believed caries were caused by worms eating the teeth. Antoni van Leeuwenhoek (1683), inventor of the first powerful microscopes, saw 'animalculis' when he examined the scrapings from teeth.

Centuries of investigation into the causes of tooth decay and ways to eliminate cavities have led researchers to point the finger at sugar and recommend proper oral hygiene, fluoridation of water supplies and regular dental treatment. Now, researchers have reached the point of developing a vaccine to reduce cavities.

"It's an age-old dream," Dr. Pierre Blais, a specialist in dental materials and devices at the Department of Health and Welfare, says. He said quite a few labs are "toying" with this idea, but none have come up with anything concrete.

The development of an oral vaccine is still in the experimental stages.

Dr. John Bozzola, assistant professor of microbiology at the Medical College of Pennsylvania began working on a vaccine three years ago with the aid of an annual \$25,000 grant. He

now is looking for support from industry to continue his work.

Dr. Bozzola injected antibody stimulating substances into the salivary glands of rats and discovered caries were reduced by about 70 per cent. He now wants to produce a vaccine for young people, which would probably be administered through the school's immunization program.

To be effective, the vaccine has to be given when a person is young, Dr. Bozzola said. "The sooner we get antibodies produced (in the person), the sooner there won't be any adherence of bacterial cells on the oral cavity. It's necessary to start the first immunization at about two months," he said.

However, the effects of this kind of immunization program would probably not show up for six to 10 years, he said.

Three researchers at the National Institute of Dental Research in Maryland are investigating the possibility of immunizing humans another way.

Dr. Michael Cole, Dr. William Bowen and Dr. Emilson infected eight human volunteers with bacteria by rinsing their mouths with Streptococcus Mutans and monitored them. After thoroughly cleaning their teeth at the completion of this initial experiment, the researchers "immunized" the volunteers by giving them a strain of Streptococcus Mutans not normally found in humans. They then reinfected them as before.

On two separate occasions, Dr. Cole says the researchers found fewer bacteria colonies on the teeth of "immunized" volunteers than those of the control group.

Dr. Cole and his fellow researchers are still analyzing the data from this initial experiment before tackling development of a vaccine to protect humans for long periods.

"There are still a number of unresolved questions as far as the vaccine goes, such as the duration of protection. So far it's been short-lived. We don't know how effective the vaccine will be as compared with the water fluoridation system (which has reduced caries), Dr. Cole said.

Dr. Jeffrey Hillman, head of the molecular genetics department at the Forsyth Dental Centre in Boston, has isolated a genetically different strain of cariogenic Mutans which produces the acid. This new strain of "good" bacteria makes less acid.

"We propose to use this new strain in what is called replacement therapy to compete with the usual strain," Dr. Hillman said. The strain would be introduced into a six-month-old child who is developing teeth. It may not cause as much tooth decay and may even eliminate caries.

Like Dr. Bozzola's theory, Dr. Hillman says his replacement strain has to be introduced into a child's system as early as possible for it to be most effective. He's still experimenting on rats and has to test the strain on monkeys next before he can consider tests on human volunteers.

The University of Toronto's Dr. Jim Sandham is investigating along similar lines. He is also replacing the natural strain of Streptococcus Mutans with a non-pathogenic strain in animals.

By taking this process one step further, Dr. Sandham estimates "good" bacteria could be implanted in the mouths of children before they are 18 months old (up to this time they don't have decay-causing bacteria). The "good" bacteria will compete and perhaps exclude bad bacteria. With the help of two graduate students and a provincial grant, Dr. Sandham has been experimenting with ways to replace the bacteria with "good" bacteria since last March.

All the researchers interviewed believe an oral vaccine could be developed within a decade. The big question in the minds of everyone is whether a vaccine will eliminate caries for an entire lifetime.

Dr. Hillman believes his replacement strain can. "This replacement strain will not cause tooth decay and will presumably eradicate caries for a lifetime," he said.

Other researchers aren't so optimistic.

Dr. Bozzola believes nothing will totally eliminate caries from the human body. "It's doubtful we could eliminate it... There will probably be a significant drop-off in the incidence of caries, but we'll never get a 100 per cent drop-off. I'm looking at a 50-70 per cent reduction."

He feels the vaccine will only eradicate tooth decay if it is used along with the traditional methods of prevention, such as fluoridation, proper care and good eating habits. "It takes hygienic measures as well as these kinds of preventive measures to almost eliminate caries," he said.

Dr. Cole agrees. "We're all cautiously optimistic, but a vaccine will not eliminate caries completely. The amount of restorative dentistry would be much reduced (by such a vaccine), but we've found there has been a reduction in dental caries anyway from the populations we've looked at." He thinks dentistry is going to change regardless of any vaccine. He says, "A vaccine is not going to put a dentist out of a job, but the dentist will have to develop new directions."

If a vaccine were developed for humans, Dr. Blais feels it would have to be administered periodically by the dentist and, as such, would be "one more adjunct in the dental treatments available already."

It's a complicated issue, according to both Dr. Stamm and a researcher in the Faculty of Dentistry at the University of Toronto. They point out the big dilemma is taking a vaccine which has been successful reducing caries in animals and administer-

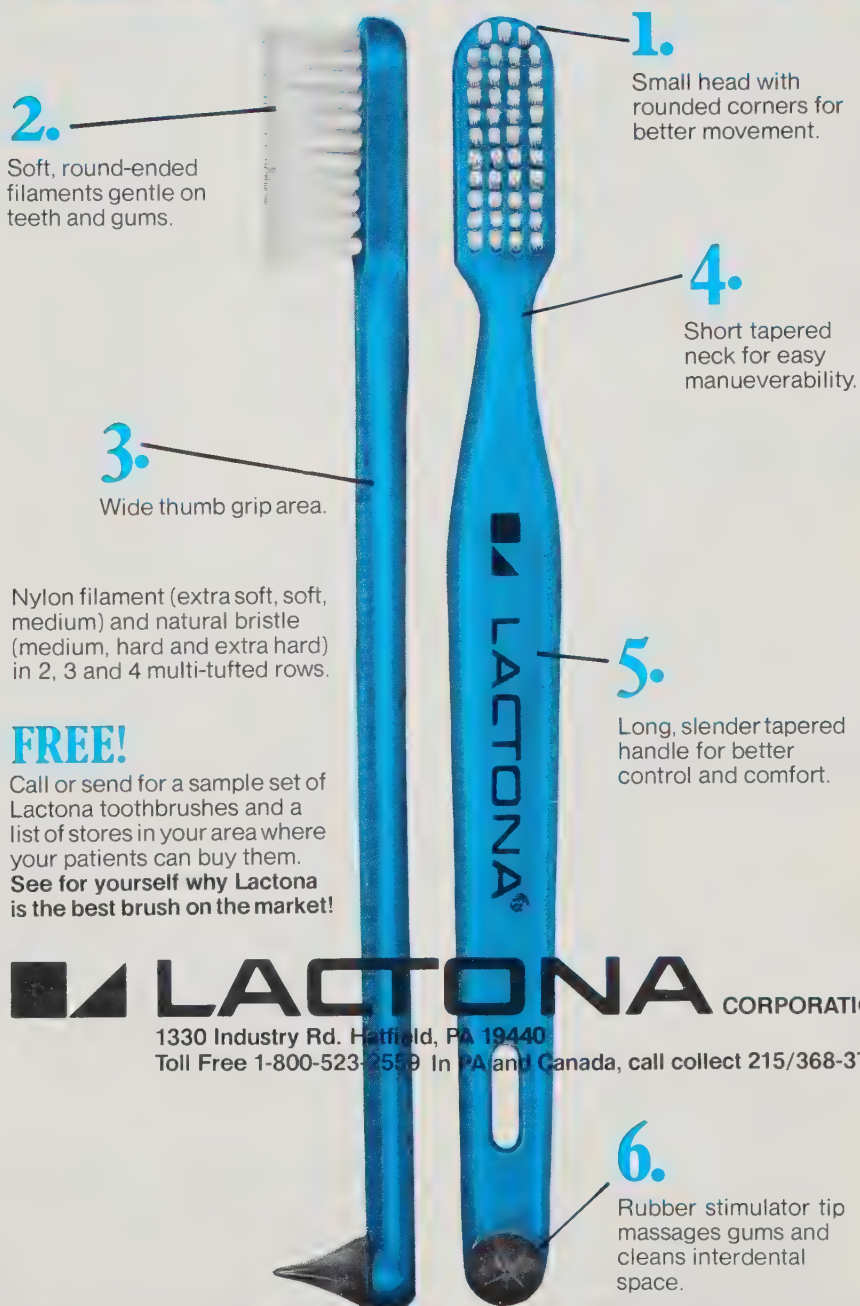
ing it to humans. This dilemma has now caused oral vaccine researchers to "run into a bit of a roadblock", Dr. Stamm said.

The researcher at Toronto expresses his feelings differently: "The vaccine for rats has not been fantastically successful. My feeling is we're very far from developing a vaccine for humans... I'm optimistic from the standpoint of research but I'm pessimistic about the time it will take to develop a vaccine for humans."

As Dr. Blais and Dr. Stamm point out, the idea of an oral vaccine has been kicking around for some time. Researchers investigating in this area continually paint a rosy picture, Dr. Stamm says. This good idea has had many fathers, Dr. Blais said.

Who knows? Perhaps a vaccine will be developed in years to come. But for now, people have recourse to the good old standbys — brushing, flossing, regular dental checkups and water fluoridation.

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CDA Resource Centre/Library — A new service for CDA members

With the advent of new and increasing activity in the CDA's Sydney Wood Bradley Memorial Library, the introduction of a full-time librarian, and the acquisition of new and current materials to add to the existing collection, CDA will be periodically highlighting publications of interest to the profession.

The library houses selected government documents, such as the House of Commons Debates, and Bills. It also carries the standard annuals in the field, represented by the *Dental Clinics of North America*, and the *Yearbook of Dentistry*. The textbook collection is still quite outdated. In terms of serials, various provincial, state, and foreign dental journals, newsletters, and bulletins are received in exchange for the CDA Journal. There is a limited number of clinical journals, but an effort will be made to order new titles for 1982.

The publications listed below are presently available from the library. Publishers' addresses are provided for those who wish to purchase the materials themselves, and to avoid long waiting periods in case of excessive demand.

Nommée en mémoire de Sydney Wood Bradley, la bibliothèque de l'ADC a multiplié ses activités, en a ajouté de nouvelles, engagé une bibliothécaire à temps complet et acquis du matériel nouveau pour ajouter à sa collection. Aussi, dorénavant, dressera-t-elle la liste des principaux ouvrages susceptibles d'intéresser la profession.

La bibliothèque conserve certains textes du gouvernement, tels les Débats de la Chambre des Communes et les Projets de loi. On y trouve également les publications annuelles courantes se rapportant à l'art dentaire, soit le *Dental Clinics of North America* et le *Yearbook of Dentistry*.

La collection de manuels est malheureusement désuète, mais les périodiques reçus en échange du Journal de l'ADC sont nombreux et variés, provenant des diverses provinces, des états américains et de l'étranger. Ce sont pour la plupart des journaux dentaires, des circulaires et des bulletins. Le nombre des journaux cliniques est plutôt restreint, mais en 1982, on tentera de commander de nouveaux titres.

La bibliothèque dispose actuellement des titres énumérés ci-dessous. On a indiqué les adresses des éditeurs à l'intention de ceux qui désirent se procurer les ouvrages pour eux-mêmes ou qui, à cause des nombreuses demandes, veulent éviter les délais prolongés.

Current Listings/ en bibliothèque

1. Adult Utilization of Dentists in Ontario, 1978-79, by D.W. Lewis and V.J. Sanders. 1v. 1979. 1c. Issued by Dental Health Care Services Research Unit, Faculty of Dentistry, University of Toronto, 124 Edward Street, Toronto, Ontario, M5G 1G6.
2. American Dental Association. Dentist's Desk Reference: Materials, Instruments and Equipment. 401 p. 1981. 1c. Issued by the American Dental Association, 211 East Chicago Ave., Chicago, IL 60611, (312) 440-2500, \$13.95.
3. American Dental Association. Understanding Capitation Dentistry. (Pamphlet). 1980. 1c. Xerox copies available.
4. American Dental Association. Council on Dental Education. Legal Provisions for Delegating Expanded Functions to Dental Hygienists and Dental Assistants. 58 p. 1980. 1c. Xerox copies available.
5. American Dental Association. Council on Dental Practice. Dental Practice Information. 1 binder. 1979. 1c. Issued by the American Dental Association, 211 East Chicago Ave., Chicago, IL 60611, (312) 440-2500.
6. Canada. Department of National Health and Welfare. Oral Radiological Services: Report of the Working Group. 108 p. 1979. 4c. Issued by Canada. Department of National Health and Welfare. Health Services Directorate. Jeanne Mance Building, 6th floor, Tunney's Pasture, Ottawa, Ontario K1A 1B4, (613) 996-7301.
7. Canada. Ministère de la Santé nationale et du Bien-être social. Services de radiologie bucco-dentaire: Rapport du Groupe de travail. 105 p. 1979. 4c. Publié par Canada. Ministère de la Santé nationale et du Bien-être social. Directions des services de santé. Edifice Jeanne Mance, 6ème étage, Tunney's Pasture, Ottawa, Ontario, K1A 1B4, (613) 996-7301.
7. Canada. Department of Health and Welfare. Preventive Dental Services: Practices, Guidelines and Recommendations. 327 p. 1979. 3c. Issued by Canada.

Le centre de documentation —

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- Department of National Health and Welfare. Health Services Directorate. Jeanne Mance Building, 6th floor, Tunney's Pasture, Ottawa, Ontario, K1A 1B4, (613) 996-7301.
- Canada. Ministère de la Santé nationale et du Bien-être social. La dentisterie préventive: Pratique, règles et recommandations. 340 p. 1979. 3c. Publié par Canada. Ministère de la Santé nationale et du Bien-être social. Direction des services de santé. Édifice Jeanne Mance, 6ème étage, Tunney's Pasture, Ottawa, Ontario, K1A 1B4, (613) 996-7301.
8. Canada. Department of Health and Welfare. Radiation Protection in Dental Practice: Recommended Safety Procedures for Installation and Use of Dental X-Ray Equipment: Safety Code — 22. 70 p. 1981. 2c. Issued by Canadian Government Publishing Centre, Supply and Services Canada, Ottawa, Ontario K1A 0S9, (613) 994-3475. \$3.95.

Canada. Ministère de la Santé nationale et du Bien-être social. Protection contre le rayonnement dans l'exercice de la dentisterie: Code de sécurité — 22. 73 p. 1981. 2c. Distribué par le Centre d'édition du gouvernement du Canada, Approvisionnement et services Canada, Ottawa, Ontario, K1A 0S9, (613) 994-3475. \$3.95.

 9. Canada. House of Commons. Obstacles: Report of the Special Committee on the Disabled and the Handicapped. 189 p. Feb. 1981. 1c. Issued by Special Committee on the Disabled and the Handicapped. House of Commons, Ottawa, Ontario, K1A 0A6, (613) 995-9570.

Canada. Chambre des communes. Obstacles: Rapport du Comité special concernant les invalides et les handicapés. 195 p. Fév. 1981. 1c. Publié par le Comité special concernant les invalides et les handicapés, Chambre des communes, Ottawa, Ontario, K1A 0A6, (613) 995-9570.

 10. Canadian Dental Association. Brief of the CDA to the Standing Committee on Banking, Trade, and Commerce, on "The Proposed Changes to Tariff Item 47810-1 and the Consequential Effect on Tariff Item 47900-1 under Bill C-50". 30 p. June 1981. Xerox copies available.
 11. Canadian Dental Association. Dental Health of Canadians — A Perspective: 143 p. 1980. 5c. Presented to the Health Services Review 1979.

L'Association dentaire canadienne. Déclaration de l'Association dentaire canadienne à la Commission d'enquête sur les services de santé. 38 p. 1980. 1c. Des photocopies disponibles.

 12. Canadian Dental Association. CDA Policy Statement on Controlled Water Fluoridation. 8 p. 1981. (journal reprint). 2c. Xerox copies available.

L'Association dentaire canadienne. Déclaration de principe de L'ADC sur la fluoruration contrôlée. 8 p. 1981. (Tirés à part). 2c. Des photocopies disponibles.

 13. Canadian Standards Association. Dental Terminology and Definitions. 40 p. 1979. 2c. Issued by Canadian Standards Association, Standards Sales, 178 Rexdale Blvd., Ontario, M9W 1R3, \$11.00.
 14. Demographic and Employment Profile of Dental Hygienists in Canada, 1979, by D.W. Lewis, M.H. Pierce, K. Carsjo, and P. Andrews. 108 p. March 1981. 2c. Issued by Dental Health Care Services Research Unit, Faculty of Dentistry, University of Toronto, 124 Edward Street, Toronto, Ontario, M5G 1G6.
 15. Dentistry in the Interdisciplinary Treatment of Genetic Diseases, edited by C.F. Salinas and R.J. Jorgenson. 200 p. 1980. 1c. Issued by Alan R. Liss, Inc., 150 Fifth Ave., New York, N.Y. 1011, (212) 741-2515. \$26.00
 16. Economic Council of Canada. Reforming Regulation. 167 p. 1981. 3c. Issued by Canadian Government Publishing Centre, Supply and Services Canada, Ottawa, Ontario, K1A 0S9 (613) 994-3475. \$9.95.

Conseil économique du Canada. Pour une réforme de la réglementation. 197 p. 1981. 1c. Distribué par le Centre d'édition du gouvernement du Canada, Approvisionnement et services Canada, Ottawa, Ontario, K1A 0S9, (613) 994-3475. \$9.95.

 17. Fédération Dentaire Internationale. IDF: What it is, How it Works, What it Does. (Pamphlet). 1978. 1c. Xerox copies available.
 18. General Dental Practice: A Handbook of Primary Dental Care. 1 binder. 1978. 1c. Issued by Kluwer Publications Ltd., 1 Harlequin Ave., Great West Road, Brentford, Middlesex, England TW8 9EW.

In the News

19. Grossman, L.I. Endodontic Practice. 10th ed. 458 p. 1981. 1c. Issued by Lea & Febiger, 600 S. Washington Square, Philadelphia, PA 19106, (215) 922-1330, \$26.50.
20. Hall, Emmett M. Canada's National-Provincial Health Program for the 1980's — A Commitment for Renewal. 102 p. Aug. 1980. 2c. Issued by Information Directorate, Department of National Health and Welfare, 5th floor, Brooke Claxton Building, Tunney's Pasture, Ottawa, Ontario, K1A 0K9, (613) 996-4950.
- Hall, Emmett M. Le programme de santé national et provincial du Canada pour les années 1980: Engagement au renouveau. 102 p. Août 1980. 2c. Distribué par la Direction de l'information, Ministère de la santé nationale et du Bien-être social. 5ème étage, édifice Brooke Claxton, Tunney's Pasture, Ottawa, Ontario, K1A 0K9, (613) 996-4950.
21. Hann, H. Jack. Environmental Fluoride, 1977: A Critique. Prepared at the request of the CDA. 16 p. 1979. 2c. Xerox copies available.
22. Lewis, D.W. Ontario Adult Dental Visits: Priorities, Attitudes, Insurance (1980). 173 p. Dec. 1980. 2c. Issued by Dental Health Care Services Research Unit, Faculty of Dentistry, University of Toronto, 124 Edward Street, Toronto, Ontario, M5G 1G6.
23. Lewis, D.W. Research into Dental Manpower in Ontario: A Summary of Concerns and Findings. 58 p. April 1981. 8c. Issued by Dental Health Care Services Research Unit, Faculty of Dentistry, University of Toronto, 124 Edward Street, Toronto, Ontario, M5G 1G6.
24. Marketing Dental Services Professionally, by R.A. Heiser, K.M. Hess, and R.E. Stallard. 1 binder. 1981. 1c. Issued by Institute for Marketing Professional Services, Inc., 7645 Metro Blvd., Edina, Minnesota, 55435, (612) 831-5310.
25. Ontario Dental Association. Ad Hoc Dental Services Advisory Committee. The Changing Dental Profession: New Directions for Practice in the 80's and Beyond. 50 p. Rev. Jan. 1981. 6c. Issued by the Ontario Dental Association, 234 St. George Street, Toronto, Ontario, M5R 2P1, (416) 922-3900.
26. Pain and Anxiety Control in Dentistry, edited by S.R. Spiro. 340 p. 1981. 1c. Issued by Jack K. Burgess, Inc. 44 Engle Street, Englewood, N.J. 07631. \$39.50.
27. Survey of Ontario Dentists 1978-79. Part I — Descriptive Findings, by D.W. Lewis and H. Cameron. 81 p. Jan. 1980. 1c. Issued by Dental Health Care Services Research Unit, Faculty of Dentistry, University of Toronto, 124 Edward Street, Toronto, Ontario, M5G 1G6.
28. Systemedics, Inc. Description and Documentation of the Private Practice Dental Delivery System. 147 p. 1980. 1c. Issued by U.S. Dept. of Health and Human Services, Public Health Service, Health Resources Administration, Bureau of Health Professions, Division of Dentistry. Center Building, 3700 East-West Highway, Hyattsville, MD 20782.
29. United States National Center for Health Care Technology. An Overview of Dental Radiology. 45 p. 1980. 1c. Issued by Moshman Associates, Inc., 6400 Goldsboro Road, Washington, D.C. 20034 (301) 229-3000.

The above items can be borrowed by Canadian dentists for a 14-day period. Renewals are possible, depending on the degree of demand. Xerox copies are meant to be kept by the users. Requests can be placed in person, by mail, or by telephone, to Ms. Margo Beres, (613) 523-1770.

Tous ces titres peuvent être empruntés par les dentistes canadiens pour une période de 14 jours. Il est possible de renouveler un prêt, à la condition qu'il s'agisse d'un titre dont la demande est restreinte. Ceux qui recevront des photocopies pourront les conserver. Veuillez adresser toute demande en personne ou par courrier à l'Association dentaire canadienne ou téléphonez Mme Margo Beres, bibliothécaire, en composant (613) 523-1770.

This material was compiled by Ms. Margo Beres, CDA'S librarian.

Compilé par Margo Beres, bibliothécaire de l'ADC.

Briefly — In the News

The American Dental Association has officially withdrawn from the Federation Dentaire Internationale, effective December 31, 1981.

The ADA Board of Trustees adopted the withdrawal resolution at its annual sessions in October.

The ADA had been attempting to negotiate a different percentage for its dues commitment to FDI for some time and felt no progress had been made in resolving the problem.

The following is an excerpt from *L'Amalgame*, the official newsletter of L'Ordre des Dentistes du Quebec; in which Dr. Jean-Guy Landry, president, warns dentists about the problems with advertising:

"We are shocked by the high number of complaints received at the Order over the past few months concerning certain dentists, especially new graduates, who use a form of advertising which is a complete departure from the Order regulations due to its obvious commercial format. The sole purpose of this unethical practice is believed to be a mere pilfering of clients among colleagues. . . . I would like to believe that those who used such methods must have done so without being fully aware of the consequences of their action. I formally urge those dentists and other colleagues who would consider joining them in such practices, to act as true professionals and to shy away from any temptation to imitate the offenders. I suggest to those in doubt as to the extent of permitted advertising, to read again the official regulation respecting advertising."

According to a recent survey conducted by ADA agencies, retail store dental facilities have increased by 80

per cent since 1980. The survey identified 63 retail store centres in 18 department store chains and three drug store chains.

A similar survey conducted in 1980 found 35 retail store dental facilities in 10 department store chains and one drug store chain. Retail store dental facilities now are established in 14 states and the District of Columbia, as compared with 10 states and the District of Columbia a year ago.

The Association of Canadian Faculties of Dentistry reports that Dr. Christian Mouton of Laval University has several research projects underway.

Dr. Mouton received a Medical Research Council of Canada grant for \$56,250 to study the relationship of surface antigens of group H serotype 1 oral streptococci and bacteroides gingivalis to interbacterial adherence. He is also studying the effect of xylitol chewing gum on oral hygiene, through a \$12,000 grant from Hoffman — La Roche Ltd.

Other research activities at the University of Manitoba include: Dr. Ian Hamilton who is studying the biochemical properties of oral pathogens; Dr. Stephen Ahing is looking at mast cell kinetics of bone and joints; Dr. Brock Love is studying radioactive emissions and dental porcelains; Dr. Peter Williams is researching implant stress breaker flexibility and reactivity of cast restoration alloys during casting; Dr. Ian Rollo is looking at initiation of human tumor stem cell assays to optimize chemotherapy in the individual cancer patient, and Dr. Algeron Karim is studying the effects of diabetes mellitus on dental hard tissues formation.

Drs. T. Chin Quee, E.C. Chan, C. Clark and R.F. Harvey of McGill

University have been awarded a research grant to carry out a study on the effects of adjunctive rodogyl therapy in the treatment of periodontal disease.

Nine students in Canada's universities are 1981 International College of Dentists Scholarship winners.

They are: Patricia Crosson, University of British Columbia; Bernadette Kobrynsky, University of Saskatchewan; Nicolina De Francesco, University of Manitoba; Shelly Karp, University of Toronto; John Lovell, University of Western Ontario; John Pappel, McGill; Michelle LaRoche, Université De Montréal; Elizabeth Bergeron, Laval Université; and Archibald Morrison, Dalhousie University.

Council on Student Affairs has compiled a manual listing information on Canadian graduate, post-graduate, internship and residency programs.

The Council has attempted to incorporate information on all known Canadian programs and will be updating this information as new data is received.

The program directors for each known course and specialty were contacted directly and requested to supply information in the following areas: application deadline date, application fee, accreditation status, number of first year positions, number of full and part-time faculty teaching the program, length of the program, patient care hours per week, lecture seminar hours per week, requirements for research or a thesis, the degree or certificate which is confirmed, tuition fee, stipend, operating privileges, admittance privileges, fur-

ther comments and contact person for further details.

It is hoped this data will be used as a guide for students seeking information on graduate, post-graduate, internship and residency programs. In light of the changing nature of this information, it is recommended that detailed data be obtained directly from individual institutions.

Anyone wishing a copy of the manual is asked to contact the Canadian Dental Association.

The Ministry of Health and Welfare recently announced approval of 11 health research awards amounting to \$192,287. A \$15,000 award went to Dr. Murray Hunt and Alan Gray of the University of Toronto who are designing a survey on the dental health of Canadian adults and their treatment needs. This survey will help provincial governments and other departments plan for dental manpower resources and services. It was recommended by The Royal College of Dentists of Canada and the Cana-

dian Association of Faculties of Dentistry, and a working group of Health and Welfare Canada.

The U.S. federal fluoridation grants program, which finished in September 1981, was termed a tremendous success, according to the American Dental Association.

The program provided fluoridation serving close to 11 million people and to 133 schools with a 46,550 population. During the three years it operated, the program provided services at a cost of less than \$1 for each person served.

The ADA's Council on Dental Health and Health Planning states it is now recommending the local dental societies meet with its state dental director to develop a strategy to promote water fluoridation prior to seeking support at the government level.

The Ministry of Health and Welfare's annual statistics on the illegal

use of drugs in Canada for 1980 were recently released and are contained in the publication *Drug Users and Convictions Statistics, 1980*. Included in the report are figures on thefts of mood-modifying drugs from pharmacies, doctors' offices and other sources during the year.

The Quebec Association of Periodontists has elected a new executive.

The president is Dr. Samuel Galperin; vice-president, Dr. Jean-Pierre Masson; treasurer, Dr. Edward Shore; secretary, Dr. Gordon Williams; past-president, Dr. Marvin Stutman.

The Canadian Association of Orthodontists recently elected a new executive. The president is Dr. Jack Dale, Toronto; president-elect, Dr. Robert Hicks, West Vancouver; past president, Dr. R.D. Haryett, Edmonton; and executive director, Dr. J.L. Ares, Edmonton.

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Tax Audits — Management Corporations and Services

Revenue Canada tax audits of management corporations and professionals receiving management services have recently increased.

These include audits of corporations rendering management services to dentists and of dentists receiving such services in non-arm's length situations.

Revenue Canada has taken the position that certain management fees charged by such corporations are unacceptable and may not be deducted when paid or payable by the dentist.

The Income Tax Act says no deductions may be made with respect to any outlays or expenses except to the extent they are reasonable in the circumstances.

Dentists should therefore be permitted to deduct all reasonable management fees charged to them by their management corporations.

Revenue Canada has acknowledged this in their Interpretation Bulletin No. IT-189, which states that a corporation is entitled to a reasonable profit for services it provides and that deduction of amounts paid to the corporation by a practitioner who is the recipient of such services is allowed if the charges for the services are reasonable in relation to the amount someone else would pay in a free market for the same services.

However, in some cases, Revenue Canada appears to be pursuing certain arbitrary policies regarding deductibility of management fees. These policies may be inconsistent with the principles outlined above.

The following points are worth noting:

1. Revenue Canada has indicated in some audits that it does not accept a service markup approach whereby a management corporation pays the

dentist's bills and charges a markup based on the amount of the bill.

For example: if a dentist's hydro bill was \$100 or \$1,000, Revenue Canada does not agree with a percentage markup based on the amount of the bill — i.e. 15 per cent of \$100 or 15 per cent of \$1,000 — as the case may be.

Revenue Canada's position appears to be that it is the value of the service — cost of time, supplies and overhead items expended in paying the bill — which should be the basis of the service markup, not the amount of the bill. There is some merit in this position. The bottom line, however, is that regardless of the method used to calculate a markup, if the resulting management fee is reasonable in relation to the amount that someone else would charge in a free market for the same service, then such a fee should be acceptable.

2. Revenue Canada has in many instances used cost plus 15 per cent as a rule of thumb and a method of determining a reasonable service fee for personal services rendered by the management corporation. (Cost in this context is the direct and overhead costs to the corporation and would not include the amount of items to be reimbursed by the professional such as the amount of his hydro bill and other bills and fees paid by the corporation on his behalf.)

A 15-per cent markup was found to be reasonable in a tax case several years ago in the Federal Court of Canada, based upon the particular facts and circumstances of that case. This is not to say that a higher markup may not be reasonable in particular circumstances.

The acid test will be what a competing management corporation would

charge for the same service to an arm's length customer and what a comparable customer would pay in a free market.

It should be noted that services, such as the renting of property or equipment owned by the management corporation which are different from strictly personal services, will also be subject to the same kinds of reasonable tests. Revenue Canada will look to the open market for what may be a reasonable charge and markup. However, the 15-per-cent approach is applicable only to personal services and not to the leasing of property or equipment owned by the management corporation.

3. If a dentist is personally reassessed on the basis that a certain fee charged to him by his management corporation, i.e. \$100, is totally unreasonable and he is therefore not permitted to treat it as a deductible expense, he should generally still be obligated to pay the full \$100 fee to the corporation and the corporation may have to report it in its income.

This obviously creates real problems for the taxpayers involved and emphasizes the importance of being accurate and reasonable in structuring fees in the first instance.

In the past, Revenue Canada might have accepted appropriate adjustments for tax purposes on both sides of the transaction, but this cannot be counted upon.

*This material was prepared by
McMillan, Binch — Barristers and
Solicitors.*

Continuing Education Tax Deduction Reminder

The Canadian Dental Association has recently received a number of inquiries concerning tax deductions for continuing education expenses. Information on this topic has been published in the past, but a summary of the way the system works is included here.

It is now permissible to deduct all reasonable travel, lodging, meal and tuition expenses connected with participation in a course enabling a professional to learn the latest methods for carrying on his/her profession.

Revenue Canada uses two tests. The first determines if the training course results in the acquisition of a new skill or merely maintains, updates or upgrades a skill the taxpayer already has.

Expenses in connection with any course which gives a credit towards a degree, diploma, professional qualification or similar certificate cannot be

deducted. However, dentists' continuing education courses do qualify.

The second test involves a determination as to whether, or to what extent, costs incurred in attending a course are reasonable. There are a number of factors involved:

1. Location of course: costs of attending training courses outside the taxpayer's general geographic locale will only be permitted when a similar course is not offered locally.

2. Duration: The normal length of a course for which expenses are allowed would be two to three weeks.

3. Non-training days: No expenses are allowed for days when no training is taken, except for days of arrival and departure. Weekend days are allowed when courses were attended on the preceding Friday and succeeding Monday.

4. Conventions: These have spe-

cific limitations. A convention does not become a training course even if some of the sessions are lectures.

5. Employed professionals: There is no provision for an employee to deduct training expenses other than tuition fees.

6. Personal or unreasonable expenses: Questions may be raised about expenses incurred in connection with courses held in distant locations or in recognized holiday areas. If a training course in such a location was of relatively short duration and was followed by a personal holiday, a portion, or all expenses claimed might be refused on the grounds that the expenses were strictly personal.

This is only a brief summary of the regulations, and readers are advised to obtain more detailed information directly from Revenue Canada or their accounting adviser.

Canada — More than 11,000 Active Dentists

The latest available figures show there are 11,095 active licensed dentists, both full and part-time in Canada.

The largest number, 4,510 is in Ontario, followed by 2,469 in Quebec; 1,658 in British Columbia; 1,027 in Alberta; 439 in Manitoba; 322 in Saskatchewan; 309 in Nova Scotia; 183 in New Brunswick; 110 in Newfoundland 40 in Prince Edward Island; 16 in the Northwest Territories; and 12 in the Yukon.

Public health specialists number 41 across the country, with two in Newfoundland; one in New Brunswick; 11 in Quebec; 26 in Ontario, and one in Manitoba.

There are 73 certified specialists in Endodontics. Ontario has 29; Quebec 19; British Columbia 12; Alberta 7; Manitoba 4; and Nova Scotia 2.

The number of specialists certified in oral surgery totals 208. There are 98

in Ontario; 40 in Quebec; 26 in British Columbia; 16 in Alberta; 10 in Manitoba; nine in Nova Scotia; four in Saskatchewan; three in New Brunswick; and one in both Newfoundland and Prince Edward Island.

Oral pathologists number 18, with seven in Ontario; five in Quebec; three in Alberta; and one in each of British Columbia, Nova Scotia and Saskatchewan.

There are 402 specialists in Orthodontics in the country. A total of 185 practise in Ontario; 76 in Quebec; 58 in British Columbia; 40 in Alberta; 14 in Manitoba; 10 in Nova Scotia; eight in Saskatchewan; seven in New Brunswick; three in Newfoundland; and one in Prince Edward Island.

Specialists in paedodontics total 120. There are 46 in Ontario; 29 in Quebec; 16 in British Columbia; 14 in Alberta; seven in Manitoba; six in Nova Scotia; and two in Saskatchewan.

Seventy-eight of the 150 specialists in periodontics practise in Ontario; 20 in Quebec; 18 in British Columbia; 14 in Alberta; eight in Manitoba; seven in Nova Scotia; four in Saskatchewan and one in New Brunswick.

Specialists in prosthodontics total 109, with 36 in Quebec; 29 in Ontario; 19 in British Columbia; 12 in Alberta; six in Nova Scotia; four in Manitoba; and three in Saskatchewan.

There are 15 certified specialists in oral radiology throughout the country. There are six in Ontario; five in Quebec; and one in each of Manitoba, Saskatchewan, Alberta and British Columbia.

The total number of dental specialists is 1,136. Of these, 504 are in Ontario; 241 in Quebec; 151 in British Columbia; 107 in Alberta; 49 in Manitoba; 41 in Nova Scotia; 23 in Saskatchewan; 12 in New Brunswick; six in Newfoundland and two in Prince Edward Island.

Dungy appointed



Dr. Arlington Franklin Dungy has assumed the position of Chief of Dentistry at the Children's Hospital of Eastern Ontario in Ottawa, replacing Dr. David J. Kenny who was appointed Dentist-in-Chief at the Hospital for Sick Children in Toronto in July, 1981.

A graduate of the Faculty of Dentistry, University of Toronto in 1956 and the Department of Anaesthesia at the University of London in 1967, Dr. Dungy was previously head of the paedodontics division at the Hospital for Sick Children in Toronto and founder of the dental program for handicapped children at McMaster University Medical Centre in Hamilton.

He holds memberships in several professional organizations including the CDA, ODA, Canadian Academy of Paedodontics, International Academy of Dentistry for the Handicapped, Canadian Society of Dentistry for Children (Ontario Chapter) and The World Federation of Haemophilia. Dr. Dungy is currently a member of the Executive and Chairman of the Program Committee for the Sixth International Congress of Dentistry for the Handicapped, Toronto.

Motrin (ibuprofen)

Product Information

Action: Ibuprofen has demonstrated anti-inflammatory, analgesic and antipyretic activity in animal studies designed to specifically demonstrate these effects. Ibuprofen has no demonstrable glucocorticoid effect.

Following a single 200 mg dose of ibuprofen in humans, useful blood levels were demonstrable in 45 minutes and still present in six hours but at barely detectable levels. Peak levels occurred at approximately one hour after ingestion. Levels were lower when taken in conjunction with food.

Ibuprofen is rapidly metabolized and eliminated in the urine. The excretion of ibuprofen is virtually complete 24 hours after the last dose. The serum half-life of ibuprofen is 1.8 to 2 hours. There is no evidence of drug accumulation or enzyme induction.

Ibuprofen has been found to be less likely to cause gastro-intestinal bleeding in doses usually used than is acetylsalicylic acid.

Clinical trials in man have shown activity of a dose of 1200-1800 mg of ibuprofen daily to be similar to that of 3.6 grams of acetylsalicylic acid daily.

Indications and Clinical Uses: Motrin (ibuprofen) is indicated for the treatment of rheumatoid and osteoarthritis. Motrin is also indicated for the relief of mild to moderate pain, accompanied by inflammation, in conditions such as musculo-skeletal trauma and post-dental extraction. Motrin is also indicated for the relief of pain associated with dysmenorrhea.

Contraindications: Ibuprofen should not be used in patients who have previously exhibited hypersensitivity to it, or in individuals with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to acetylsalicylic acid or other nonsteroidal anti-inflammatory agents. (see WARNINGS).

Ibuprofen should not be used during pregnancy, in nursing mothers or in pediatric patients because its safety under these conditions has not been established.

Warnings: Anaphylactoid reactions have occurred in patients with known A.S.A. hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported in patients receiving ibuprofen. Peptic ulceration, perforation, or severe gastrointestinal bleeding can have a fatal outcome, and although few such reports have been received with ibuprofen, a cause and effect relationship has not been established. Ibuprofen should be given under close supervision to patients with a history of upper gastrointestinal tract disease.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in colour vision have been reported. If a patient develops such complaints while receiving ibuprofen, the drug should be discontinued and the patient should have an ophthalmologic examination.

Fluid retention and edema have been reported in association with ibuprofen, therefore, the drug should be used with caution in patients with a history of cardiac decompensation or renal disease.

Ibuprofen, like other nonsteroidal anti-inflammatory agents, can inhibit platelet aggregation but the effect is quantitatively less and of shorter duration than that seen with acetylsalicylic acid. Ibuprofen has been shown to prolong bleeding time (but within the normal range) in normal subjects. Because this prolonged bleeding effect may be exaggerated in patients with underlying hemostatic defects, ibuprofen should be used with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients on ibuprofen should be cautioned to report to their physicians signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

When ibuprofen is added to the treatment program of patients who have been on prolonged corticosteroid therapy, and it is decided to discontinue this therapy, the corticosteroid should be tapered slowly to avoid exacerbation of disease or adrenal insufficiency.

Aseptic meningitis has been reported in connection with ibuprofen therapy in patients with systemic lupus erythematosus. Such patients may also develop hypersensitivity reactions to ibuprofen such as fever, rash or abnormal liver function more often than those with other disorders. Caution should therefore be exercised when considering ibuprofen therapy for patients with systemic lupus erythematosus.

Drug Interactions

Coumarin-type anticoagulants: Several short-term controlled studies failed to show that ibuprofen significantly affected prothrombin times or a variety of other clotting factors when administered to individuals on coumarin-type anticoagulants. However, because bleeding has been reported when ibuprofen and other nonsteroidal anti-inflammatory agents have been administered to patients on coumarin-type anticoagulants, the physician should be cautious when administering ibuprofen to patients on anticoagulants.

A.S.A.: Animal studies show that A.S.A. given with nonsteroidal anti-inflammatory agents including ibuprofen yields a net decrease in anti-inflammatory activity with lowered blood levels of the non-A.S.A. drug. Single dose bioavailability studies in normal volunteers have failed to show an effect of A.S.A. on ibuprofen blood levels. Relative clinical studies have not been done.

Adverse Reactions: The following adverse reactions have been noted in patients treated with ibuprofen:

Note: Reactions listed below under Causal Relationship Unknown are those which occurred under circumstances where a causal relationship could not be established. However, in these rarely reported events, the possibility of a relationship to ibuprofen cannot be excluded.

Gastrointestinal: The adverse reactions most frequently seen with ibuprofen therapy involve the gastrointestinal system.

Incidence 3 to 9%: nausea, epigastric pain, heartburn
Incidence 1 to 3%: diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the gastrointestinal tract (bloating or flatulence)

Incidence less than 1%: gastric or duodenal ulcer with bleeding and/or perforation, gastrointestinal hemorrhage, melena, hepatitis, jaundice, abnormal liver function (SGOT, serum bilirubin and alkaline phosphatase).

Central Nervous System

Incidence 3 to 9%: dizziness

Incidence 1 to 3%: headache, nervousness

Incidence less than 1%: depression, insomnia

Causal relationship unknown: paresthesias, hallucinations, dream abnormalities

Dermatologic

Incidence 3 to 9%: rash (including maculopapular type)

Incidence 1 to 3%: pruritis

Incidence less than 1%: vesiculobullous eruptions, urticaria, erythema multiforme

Causal relationship unknown: alopecia, Stevens-Johnson syndrome

Special Senses

Incidence 1 to 3%: tinnitus

Incidence less than 1%: amblyopia (blurred and/or diminished vision, scotomata and/or changes in colour vision). Any patient with eye complaints during ibuprofen therapy should have an ophthalmological examination (see PRECAUTIONS)

Causal relationship unknown: conjunctivitis, diplopia, optic neuritis

Metabolic

Incidence 1 to 3%: decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Hematologic

Incidence less than 1%: leukopenia and decreases in hemoglobin and hematocrit

Causal relationship unknown: hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes (e.g. purpura, epistaxis, hematuria, menorrhagia).

Cardiovascular

Incidence less than 1%: congestive heart failure in patients with marginal cardiac function, elevated blood pressure

Causal relationship unknown: arrhythmias (sinus tachycardia, sinus bradycardia, palpitations)

Allergic:

Incidence less than 1%: anaphylaxis (see CONTRAINDICATIONS)

Causal relationship unknown: fever, serum sickness, lupus erythematosus syndrome.

Endocrine

Causal relationship unknown: gynecomastia, hypoglycemic reaction

Renal:

Causal relationship unknown: decreased creatinine clearance, polyuria, azotemia

Symptoms and Treatment of Overdosage: A nineteen month old child weighing 12 kg ingested from 2800 to 4000 mg and presented with apnea, cyanosis and responded only to painful stimuli. Oxygen and parenteral fluids were given and at 12 hours she appeared completely recovered. Two other children (10 kg each) ingested 1200 mg of ibuprofen each and there were no signs of acute intoxication or late sequelae. A 19 year old male who had ingested 8000 mg of ibuprofen reported dizziness, and nystagmus was noted. He recovered with no reported sequelae after parenteral hydration and three days' bed rest.

In cases of acute overdosage, the stomach should be emptied by vomiting or lavage, though little drug will likely be recovered if more than an hour has elapsed since ingestion. Because the drug is acidic and is excreted in the urine, it is theoretically beneficial to administer alkali and induce diuresis.

Dosage and Administration: *Rheumatoid arthritis and osteoarthritis:* The initial daily dosage in adults is 1200 mg divided into 3 or 4 equal doses. Depending on the therapeutic response, the dose may be adjusted downward or upward. The daily dosage should not exceed 2400 mg.

Maintenance therapy, once maximum response is obtained, will range from 800 to 1200 mg per day.

Mild to moderate pain associated with inflammation, dysmenorrhea: 400 mg repeated as required every 4 to 6 hours. The daily dosage should not exceed 2400 mg.

Children: Due to the lack of clinical experience, ibuprofen is not indicated for use in children under 12 years of age.

Supplied: 200 mg (yellow), 300 mg (white), 400 mg (orange) sugar-coated tablets and 600 mg (peach) film-coated tablets in bottles of 100 and 1000

Product monograph available on request.

7910 REGISTERED TRADEMARK MOTRIN CE 1542 1A

Upjohn

THE UPJOHN COMPANY OF CANADA
865 YORK MILLS ROAD
DON MILLS, ONTARIO



Delivery of dental services to Native people in Canada has been a serious topic of discussion over the past year.

Look before you leap

Lists of dentists expressing interest in this field have been compiled in Alberta, Quebec, Ontario and Nova Scotia. This has been most encouraging to all parties involved and steps are being taken to implement the system. The process will move slowly as many factors must be considered and worked out in advance if this program is to be successful. There will be some trial runs — some of which will run smoothly, while others will be a disaster. One of the problems that must be dealt with will be that of properly orientating dentists to life and practice on an Indian reserve. The purpose of this article is to provide some insight into that subject.

If your name is on one of those lists, or if you are contemplating the prospect, read on. Before you leave that comfortable office and that better-than-average home in a community blessed with multiple services, there are a few things you should be fully aware of.

Transportation

Because many Indian reserves in Canada are relatively close to urban centres, the majority of these people receive dental services from local private practitioners. Therefore, it is possible you may be asked to go to a remote fly-in community. Air Canada does not service these areas, so you can expect to fly on anything from a four to 20-seat aircraft. It is likely

some of the space will be shared with a variety of cargo, possibly including the portable dental equipment you will be using. If it happens to be winter, dress warmly. Many of these aircraft have a tendency to be somewhat drafty.

For your first excursion, I strongly recommend you request to be accompanied by someone from Medical Services who is familiar with clinic routine and life in these communities.

When you arrive at your destination it is possible you may be met by a nurse, community health worker, or caretaker, but don't count on it. If you are not met, your first contact should be the nursing station, so find out where it is located and go there by whatever means is available — that may mean walking.

Contacts on Reserve

Having met the nursing staff, I strongly recommend you arrange a visit to the chief to introduce yourself. In so doing, always bear in mind that you are a guest on his reserve and he has the authority to ask you or anyone else to leave.

Next, you should visit the school and meet the Principal as you will likely be setting up your clinic in his school and will require the co-operation of the teachers as you will undoubtedly be disrupting classes for your patient supply.

The caretakers from both the school and the nursing station are worthwhile meeting as they can often be of assistance with equipment problems. Last but not least, the local community health worker can prove to be an excellent liaison between you and the community at large.

Clinic Space

It is best you get rid of any illusions of grandeur right now, as this facility will bear no resemblance to your own office. You should anticipate a one-room operation that will be in either the school, the nursing station, or the band office. With the exception of rare instances in very remote locations, this room will have a sink with

hot and cold running water.

Living Accommodation

Typically, there will likely be a trailer adjacent to the nursing station that will be home for the duration of your stay. It will consist of a living room, kitchen, washroom, and two or three small bedrooms. You can expect to have to share this accommodation with a variety of people including a dental assistant who may be sent with you, a visiting doctor, or a variety of Medical Services staff. You will obtain food from the nursing station and will likely have to do your own cooking. All visiting staff are expected to leave the trailer clean on departure.

The nursing station will likely supply lunch and may, on occasion, invite you in for dinner. It is wise to inquire in advance as to the status of the reserve you are visiting. If it is a dry reserve, don't take any liquor with you.

Equipment and Supplies

We are all aware of the cost of dental equipment these days and Medical Services is responsible for providing care to hundreds of Indian reserves. Many of these communities receive no more than 6-8 weeks of dental service a year. As such, it is not economically feasible to set up clinics in all areas with permanent equipment. Because of this, Medical Services uses portable equipment. You can expect to find a portable unit with built-in water supply and suction, two high-speed handpieces, one slow-speed handpiece, a three-way syringe, and a fibre-optic light. The chair may range anywhere from a simple fold-up portable model to a motorized recliner depending on circumstances. A sterilizer, amalgamator and compressor are usually permanent fixtures on site but it is not unusual to find that the compressor has been "borrowed" for use elsewhere in the community. A standard hand instrument kit is issued but will not necessarily include all your individual preferences so if you are adamant about a specific type of forcep you would be well advised to pack your personal favorites. The

supply box will include all basic consumables and although the variety is limited, it should be acceptable in most cases. X-Ray equipment will not be available in all locations.

Culture

You will soon discover you are in an environment entirely different from what you have come to expect. For the community at large, time does not hold the importance it does for you, so don't anticipate a rigid appointment schedule. Your primary concern will be to provide treatment to the school-age population and this can be scheduled through the teachers on an as-required basis. The usual procedure is to work on children from 9 am to 3:30 pm followed by adults until 5 pm. The Principal will not likely appreciate your filling the school halls with adults during the normal school day.

Please note it is essential no treatment be carried out on children unless they have a consent form signed by the parent or guardian. This has usually been pre-arranged and the consents will be on file in the clinic along with the patient treatment charts.

We strongly urge that you do not fight with an unco-operative child in the chair. The Indian population does not necessarily discipline their children in the same manner that you do nor do they place the same priority on dental care you and I have become accustomed to expect from an urban population. Many of these communities have had several different dentists visit them in past — some good and some otherwise. Bear this in mind as you will be considered to be on trial until a few people have been treated and the word filters through the community.

You may find the older segment of the population somewhat hesitant to ask questions. Take time to discuss their problems with them. Some may not speak English and if such is the case, ask for the assistance of an interpreter. This is not unusual. Choose your words carefully to avoid mis-

understandings. As an example, avoid the phrase "private practice". This is often interpreted as meaning you are still learning and hence are not yet qualified.

You will learn more of the culture as you go along and will undoubtedly find it a fascinating experience. If nothing else, you will come face to face with the type of lifestyle these people lead and it will certainly serve to bring you to a greater appreciation of your own privileged position in society.

Oral Health Conditions

Depending on the amount of service the community has received in the past, you will become very aware of the great need for dental care that the Native population faces. DMF indices in the range of 8 to 11 are not uncommon compared with Toronto school children where the DMF has been reported to be 1-1, so you are probably in for a shock. Don't hesitate to take some time to do a bit of classroom dental education if the opportunity arises. If the school is keen on developing preventive programs such as brush-ins or rinse programs, be sure to follow it up with Medical Services as they will provide you with the necessary supplies. If you are getting an unusually high request for dental floss, don't be surprised to find out it is being used to sew mocassins. It is excellent for this purpose — you may not have accomplished everything you thought you had!

The nursing station can supply you with a list of medically at-risk patients and this should be kept on hand in the clinic. Do not attempt heroics. There are means for referring cases out to major centres where circumstances dictate that field treatment would be unwise. If treatment problems do arise, consult the nurse in charge or call Medical Services Regional Office.

General

I do not intend to go into any detail regarding general administration of this program. It will vary with arrangements being made between

Medical Services and your Provincial Dental Association. I only want to suggest you determine what arrangements have been made regarding:

- 1) transportation
- 2) clinic schedules
- 3) reporting systems
- 4) method of payment
- 5) insurance coverage
- 6) unavoidable cancellation of clinics
- 7) compensation for detainment due to weather

It is best that you have the answers to these kinds of questions before you go.

Conclusions

It is not the intention of this article to discourage anyone from becoming involved in this program. Many will simply not be cut out for this type of outreach service, but for those who are, it is my hope that I have painted a realistic picture of what you can expect. If you are prepared to accept the problems you will encounter, there are rewards awaiting you that you will simply never experience within your own practice. The problems outlined become less if you going to drive-in reserves closer to major centres, and they compound if you go to the remote areas of the Northwest Territories.

I would urge you to sample this program and judge for yourself. There is more to experience than the four walls of a standard dental office — possibly a whole new career. For my part, I left my practice for a year and went north with my family. A year after returning I joined Medical Services.

I came across an article that included a statement summing up my feelings and is a suitable conclusion: "No one can live for long in the North without being profoundly influenced by both its complexity and simplicity. All that is superficial, superfluous and unnecessary is forever eliminated from your life. The Arctic, in fact, changes your destiny". TRY IT!

This material was prepared by Dr. W.R. Bedford.

Publications

Grant, M.

Handbook of Community Health

*Lea & Febiger
Philadelphia, Pa., 1981
Third Edition
368 pp.*

Dr. Grant has written a readable and concise handbook covering the basic topics dealing with community health issues. As prefaced by the author, it was unforeseen at the time of the first edition, 14 years ago, that government would be so involved with health care issues. Therefore, the latest edition has been updated to include pertinent material such as the role of the federal government in the delivery of health care. New chapters have also been added to meet current needs, such as geriatrics, medical sociology, quality of care, health care planning, manpower and delivery.

The publication is not intended as a comprehensive text but only as an introduction to the field of public health. As the author so aptly states, it is "designed for those who need or desire to learn something about the content of community health and hopefully whetting the appetite of some to subsequently explore in further depth."

The author briefly reviews and discusses issues related to the multidisciplinary facets of community health. The narrative is easy to read and is supported by many charts, tables and statistical data. References, dealing with the particular topic, are provided at the end of each chapter.

The soft cover book contains a total of 21 chapters for the assigned topics. All statistical data are for the United States and, therefore, in order to apply to the Canadian scene, the reviewer found it useful to reduce the figures by one-tenth.

The nature, scope and prevention of the stated problems are similar in both countries. However, due to the population difference, the adjustment of statistical rates is required. It would be useful to have access to a similar publication dealing with the same topics in the Canadian setting.

The contents of the handbook, with a brief descriptive summary, include:

1. Epidemiology and genetics
2. Health statistics
3. Principles in prevention of communicable diseases
4. Principles in prevention of chronic disease
5. Geriatrics
6. Medical sociology
7. Environmental factors in disease prevention
8. Maternal and child health
9. Food and nutrition
10. Dental health
11. Mental health, alcoholism and drug addiction
12. Mental retardation
13. Occupational health
14. Accidents
15. Planning for disaster
16. Medical care
17. Quality of care
18. Health care delivery
19. Health manpower
20. Health planning
21. Organization of health services

The reviewer found the book lucidly written and easy to read. The publication makes a handy practical reference text for any dentist with an interest in the area of community health and will make a welcome addition to his/her library.

This book was reviewed by Dr. K. Ambrozaitis, Public Health Branch, Regional Municipality of York.

Jack E. Manning,
Chief Editor

General Dental Practice.

A handbook of primary dental care

*Kluwer Publishing Limited
1 Harlequin Ave., Great West Road
Brentford, Middlesex TW8 9EW
London, England
1980*

The publication is in two parts; this review encompasses Part A: Dental practice. Thirty authors have contributed to the manual.

A conversational writing style is employed, which provides for easy reading. This format complements what is primarily a philosophical exposition on dental practice. Part A is essentially a guide to the scope of dental services. As such, its value as a handy reference to the practitioner for current concepts or clinical procedures is limited.

This handbook would be an asset to the lay person for patient education. It is also well suited as a general information source for the dental assistant.

In summary, this publication cannot be recommended for purchase as a source of information for the dental practitioner. It does have merit as a guide for patients, and is very appropriate for placement in the dental reception area.

This book review was prepared by Dr. Dennis B. Gilboe, Professor and Chairman, Division of Fixed Prosthodontics, University of Alberta.

from this procedure after in-depth study by the Board.

Much of the planning and program activity of the Canadian Dental Association is carried out by the 24 councils and committees.

There are also independent specialty sections on endodontics, oral pathology, oral radiology, oral and maxillofacial surgery, orthodontics, paedodontics, periodontology, prosthodontics, and public health dentistry.

Affiliated societies of the CDA include the Association of Canadian Faculties of Dentistry, the Canadian Fund for Dental Education, the National Dental Examining Board, the Royal College of Dentists of Canada and the Canadian Dental Services Plans Inc.

SERVICES

More than 80 volunteers from the profession and 22 full-time CDA staff members conduct the affairs of the Association.

A brief summary of the councils and committees and some of the services they provide follows:

Management Committee

The Committee is comprised of the president, the president-elect and the immediate past-president. The president-elect chairs the meetings.

The committee is custodian of all monies, securities and deeds belonging to the Association. It presents an annual report to the Executive Council which includes the Auditor's Report for the preceding year and the budget that has been proposed for the succeeding fiscal year. The Executive Council then presents the annual report to the Board of Governors.

Convention Committee

The CDA holds one of the largest professional conventions in Canada. The convention features reports from recognized authorities in major dental fields as well as a large number of clinical presentations, scientific films and health and commercial dental exhibits. Together with the corporate member in the province where the

convention is located that year, the CDA convention committee organizes both the scientific and social programs.

Membership Committee

The committee operates to enhance membership in the CDA with particular attention to Ontario and Quebec where membership is voluntary. CDA also conducts its own student membership campaign in all provinces except Ontario, where it liaises with the provincial committee.

Product Acceptance Committee

The committee evaluates research carried out by dental manufacturers to determine if the CDA Seal of Recognition should be awarded for dentrifices and mouthwashes which contain effective decay preventive agents, and monitors advertising of these products.

Taxation Committee

Committee members identify areas where federal taxation legislation or regulations are unjust or unfair to the individual dentists and/or the public and recommend necessary action to correct the inequities. Members formulate a plan of action and obtain supportive data for submissions to governments. They also liaise with members of other professional associations.

Editorial Board

This board is responsible for the publication of the Journal of the Canadian Dental Association. The Journal contains a variety of scientific and professional articles, as well as features including book reviews, provincial matters and faculty news, classified advertising, and dental meetings and activities.

Council on Constitution and Bylaws

Members of the council review the bylaws, letters patent and any supplementary letters patent, recommend amendments, and draft or review the text of all proposed amendments.

Council on Dental Materials and Devices

Council members act in an advisory and consultative capacity evaluating materials and devices employed in the

practice of dentistry and the maintenance of oral health. The council develops standards for materials and devices and encourages a program for testing, evaluation, acceptance and certification. It reviews and comments on advertising and/or demonstration on any non-pharmacological aspects of materials and devices. The council also communicates to the membership information considered of importance and interest.

Council on Education

Members of the council study, develop guidelines and evaluate matters relating to dental education.

The Canadian Dental Association is the official accreditation body for educational institutions. It investigates undergraduate, graduate and post-graduate specialty programs in the dental faculties at Canadian universities, dental assisting programs at community colleges and dental hygiene programs at both universities and community colleges, followed by periodic reviews.

In addition, the council is responsible for the Dental Aptitude Test (DAT) which is a twice-yearly evaluation for pre-dental students to test academic abilities and manual skills. More than 1,800 students participate annually in DAT.

The council also assists corporate members or provincial licensing bodies, or both, with dental education. As well, members are responsible for evaluating the role of the CDA in continuing education. Studies, projects and programs are undertaken as deemed necessary in order to fulfill this function.

Much of the work of the above council is undertaken by four committees divided into a) Undergraduate, Graduate/Postgraduate; b) Auxiliaries; c) Dental Admissions Test; and d) Continuing Education.

Council on Ethics

Council members recommend ethical standards and promote ethical principles. The CDA has a Code of Ethics which is regularly reviewed to encourage the highest possible stand-

ards of dental practice and to protect the public from improper and unethical practices and treatments. The Code serves as a guide to provincial dental organizations, encouraging uniformity in practice ethics across Canada.

Council on Health Care

This council is broken down into three committees and several subcommittees:

- (a) Committee on Public Health and Preventive Dentistry — subcommittees deal with fluoridation, nutrition and radiation protection.
- (b) Committee on Dental Programs and Services — subcommittees deal with several subjects including dentistry for the disabled, geriatric care, prepayment programs, publicly funded dental plans, uniform system of coding and list of services, and alternative delivery systems.
- (c) Committee on Dental Auxiliaries

Members of the Council on Health Care determine and evaluate methods of preventing and treating dental disease and abnormalities through an examination of dental health care delivery systems, including public health programs. They also report on the economics of various methods, study the need for and development of auxiliary dental personnel, and develop and identify resource documents to be made available to corporate members on request.

Council on Hospital Services

The council assists in maintaining a high standard of dental services in Canadian hospitals. Members accredit hospital dental services and define roles and responsibilities which meet the requirements of the corporate members. The council also examines and reports on the provincial acts governing dental services in hospitals.

Council on Information Services

Council members develop guidelines for methods and programs to disseminate education information to the profession and to the public through all media. One instrument is the subcommittee on National Dental

Health Month which highlights the importance of good dental hygiene.

In addition, the council is responsible for many health education pamphlets and career brochures which are continually updated and distributed at the rate of more than a quarter of a million yearly. A dental film series, reviewed by the council, is made available to the public and profession as well.

Members of the profession are kept abreast of current issues through the CDA Journal, CDA Communiques and information letters. CDA Headquarters staff also answer more than 200 inquiries a week from members of the public, the dental profession, the media and the business community.

Council on Insurance and Investment

Members of the board of directors of the Canadian Dental Service Plans Inc. (CDSPI) are appointed annually to act as the Council on Insurance and Investment.

The CDA offers both a Registered Retirement Savings Plan and Group Insurance to Canadian dentists. The council recommends the kinds of insurance and terms of coverage required through surveys and negotiations with the insurance market to determine costs, terms and conditions of available coverage.

The council reviews insurance contracts, recommends the manner of distribution of surplus and reserve funds, and advises on and reviews association-sponsored pension and retirement savings plans.

The council also recommends a premium collection agency, the terms of contract for premium collection, and reviews its function to determine efficiency and economy.

Council on Nominations

The council is comprised of three members elected by the Board of Governors at its annual meeting. The past-president of CDA acts as chairman. The council prepares a list of all elective offices to be filled, invites and receives in writing nominations for each elective office, rules on the eligibility of the nominees, and makes

further nominations to be sure there is at least one eligible nominee for each vacancy.

Council on Student Affairs

The council reports on students' interests and activities. It organizes and conducts the annual Canadian Dental Students' Conference and recommends policies bearing on student members' involvement in national and international dental student affairs.

LIBRARY

The Sydney Wood Bradley Memorial Library, located at CDA headquarters, acts as a resource and information centre for the dental profession. The library houses a limited selection of dental literature and current periodicals, in addition to up-to-date information on continuing education and reference material of interest to the dental profession on a national basis. The library also acts as a depository of information by collecting relevant data and material of local input from provincial associations on dental issues of national concern.

NATIONAL AND INTERNATIONAL RELATIONS

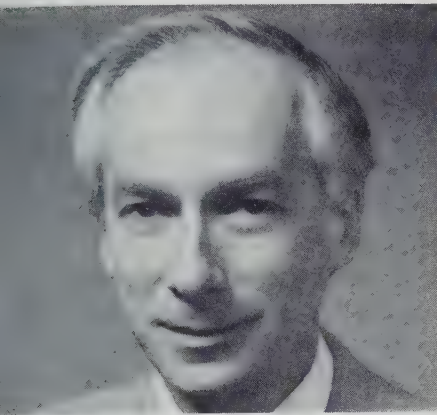
As well as being affiliated with the national societies mentioned earlier, the CDA also liaises with the Canadian Dental Hygienists' Association and the Canadian Dental Nurses' and Assistants' Association.

On the international scene, the CDA liaises with the American Dental Association (ADA), and is affiliated with the International Standards Organization (ISO), the World Health Organization (WHO), and the Federation Dentaire Internationale (FDI), to ensure a continuing exchange of scientific information and a constant flow of ideas in the dental world community.

All of these inter-related bodies work together with one aim in mind — to provide the best possible dental service in Canada and to serve the public in the best possible way.

Convention Speakers

Conférenciers invités au Congrès



Dr. A.T. Storey

Dr. A.T. Storey will be speaking on new perspectives in occlusion and malocclusion, using clinical cases and recent research to illustrate his points. A Ph.D. in physiology, Dr. Storey is Professor and Head of the preventive dental science department, Faculty of Dentistry, University of Manitoba. He is the author of many books and papers, and is a member of several dental associations.

Le Dr A.T. Storey parlera des nouvelles optiques touchant l'occlusion et la malocclusion, utilisant, pour illustrer ses idées, des cas cliniques et les résultats des dernières recherches. Docteur en physiologie, le Dr Storey est professeur et directeur du département de science dentaire préventive, à la Faculté de dentisterie de l'Université du Manitoba. Il a signé plusieurs articles et ouvrages, et il est membre de plusieurs associations dentaires.

Mr. B.S. Wortzman of Toronto will be discussing jurisprudence.

Monsieur B.S. Wortzman, de Toronto, parlera de jurisprudence.

CDA/ODA Convention Program — Toronto

Monday, May 10		Tuesday, May 11		Wednesday, May 12
9.00 — 11.00 a.m.	2.30 — 4.30 p.m.	9.00 — 11.00 a.m.	2.30 — 4.30 p.m.	9.00 — 11.00 a.m.
Cinema II (340) Storey (Grieve Mem)	Cinema II	Cinema II Shillingburg	Cinema II Shillingburg	
Dominion North (300) Brodie-Brockwell	Dominion North Lackie	Dominion North Druck	Dominion North Brodie-Brockwell	Dominion North Lackie
Dominion South (300) Druck	Dominion South Weinberg	Dominion South Weinberg	Dominion South Wortzman	Dominion South Wortzman
Essex (350) Ripa	Essex Ripa	Essex	Essex Hettenhausen	Essex Hettenhausen
Windsor (120)	Windsor	Windsor Pitkin	Windsor J. Edelson (Endo)	Windsor J. Edelson (Endo)
	Civic Table Clinics		Civic Table Clinics	
	Kent & Huron Mini clinics		Kent & Huron Mini clinics	
	Simcoe-Dufferin CDA Students			

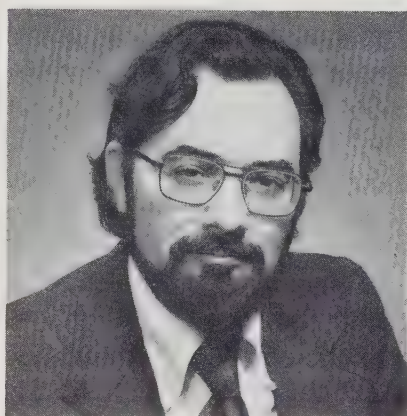
Congrès



Dr. F.C. Lackie

Since 1963, Dr. F.C. Lackie has been in private practice and teaches periodontics at the University of Toronto as an Associate in Dentistry. His presentation on occlusal adjustment of the natural dentition will include a history of the various approaches to occlusal adjustment, a description of the extra and intra-oral examination of the masticatory system, and details on the technique for centric and eccentric occlusal adjustments.

Depuis 1963, le Dr F.C. Lackie est praticien privé et enseigne la parodontologie à l'Université de Toronto à titre d'adjoint en dentisterie. Son exposé sur la rectification de l'occlusion de la denture naturelle comprendra l'historique des divers procédés pour rectifier l'occlusion, une description de l'examen extra et intra-buccal du système masticatoire, et des détails sur la technique pour rectifier l'occlusion centrique et excentrique.



Dr. Louis Ripa

Professor and Chairman of the department of children's dentistry at the School of Dental Medicine, State University of New York, Dr. Louis Ripa has served as a dental consultant to the U.S. Public Health Service and the National Institute of Dental Research. An author of over 100 dental articles, Dr. Ripa will be discussing methods for the elimination of dental decay in the child patient with special attention given to fluoridation.

Professeur et président du département de la dentisterie pour enfants à l'École de médecine dentaire de l'Université de l'État de New York, le Dr Louis Ripa a agi comme consultant dentaire auprès du Service américain de santé publique et de l'Institut national de recherche dentaire. Auteur de plus de cent articles sur la dentisterie, le Dr Ripa parlera des méthodes pour éliminer les caries chez l'enfant et accordera une attention toute spéciale à la fluoruration.



Dr. C.G. Brodie-Brockwell

Dr. C.G. Brodie-Brockwell, a graduate of McGill University, spent 30 years investigating the causes of myofacial pain dysfunction, relating changes created in the occlusion. His presentation will be dealing with the excursal angle and myofacial pain dysfunction. Dr. Brodie-Brockwell has presented earlier findings to the British Dental Association, the Royal Gnathological Society and the medical staff of the Ross Memorial Hospital.

Le Dr. C.G. Brodie-Brockwell, diplômé de l'Université McGill, a consacré trente années à rechercher les causes du dysfonctionnement des muscles faciaux, établissant un rapport entre les changements des symptômes et les changements qui se produisent dans l'occlusion. Son exposé portera sur le mouvement de latéralité et le dysfonctionnement des muscles faciaux. Le Dr Brockwell a déjà fait état de ses découvertes à la *British Dental Association*, à la *Royal Gnathological Society* et au personnel médical du *Ross Memorial Hospital*.



Dr. W.K. Hettenhausen

Dr. W.K. Hettenhausen, Executive Director and Founding Officer of the "Your Teeth for a Lifetime Foundation" will be discussing how to generate health in the oral environment. His presentation features a lecture and slide show which stresses maximizing health awareness and communicates positive health values that can be translated into the office environment. Dr. Hettenhausen practises in Thunder Bay, Ontario and lectures for the Royal College of Dental Surgeons.

Le Dr W.K. Hettenhausen, directeur exécutif et fondateur de la "Your Teeth for a Lifetime Foundation", parlera de la façon de favoriser la santé dans l'environnement buccal. Son exposé comprendra une conférence accompagnée d'une projection de diapositives dont le but sera de souligner l'importance d'éveiller la conscience des gens au sujet de leur santé ainsi que de donner des conseils pratiques pour les cabinets dentaires. Le Dr Hettenhausen pratique à Thunder Bay (Ontario).



Dr. Simon Weinberg

Dr. Simon Weinberg, a graduate of the University of Toronto, will be speaking on complications during and after oral surgery, with special emphasis on practical tips to prevent or treat these emergency cases. Associate Professor of the oral and maxillofacial surgery department at U. of T., Dr. Weinberg has lectured widely and contributed to dental publications.

Le Dr Simon Weinberg, diplômé de l'Université de Toronto, parlera des complications qui surgissent pendant et après une opération dans la bouche, s'arrêtant surtout à donner des conseils pratiques pour prévenir ou traiter les urgences. Professeur adjoint du département de chirurgie maxillo-faciale, à l'Université de Toronto, le Dr Weinberg a prononcé de nombreuses conférences et signé plusieurs articles de médecine dentaire.



Dr. Joseph Druck

Dr. Joseph Druck is on part-time clinical staff at the Faculty of Dentistry, University of Toronto and was a featured guest clinician at the Premier Congress of Oral Implantology in Paris, France 1972. A frequent lecturer to Canadian dental societies and study groups, Dr. Druck will be speaking on the endosseous blade implant and the subperiosteal implant techniques.

Le Dr Joseph Druck fait partie du personnel de la clinique à temps partiel de la Faculté dentaire de l'Université de Toronto. Il a été invité à titre de clinicien au Premier Congrès d'implantologie tenu à Paris en 1972. Souvent invité à donner des conférences dans les sociétés et groupes d'études dentaires, le Dr Druck expliquera les techniques touchant les implants endo-osseux et sous-périostés.



Dr. Herbert Shillingburg

A Professor and Chairman of the department of fixed prosthodontics at the University of Oklahoma College of Dentistry, Dr. Herbert Shillingburg has done research on tooth preparation design and is the author of four textbooks on fixed prosthodontics. He will be speaking on how to avoid the common problems in doing cast restorations and how to choose the best cement for crown retention.

Professeur et président du département des prothèses fixes au Collège de dentisterie de l'Université de l'Oklahoma, le Dr Herbert Shillingburg a effectué des recherches sur la conception des préparations des dents et a signé quatre livres d'examen portant sur les prothèses fixes. Il parlera de la manière d'éviter les problèmes communément rencontrés lors des restaurations avec des modèles et il indiquera comment choisir le meilleur ciment pour lier les couronnes.



Dr. Gary Pitkin

Dr. Gary Pitkin's seminar on the medical-legal aspects of cardiopulmonary resuscitation will address many controversial issues regarding the provision of CPR by qualified individuals. A graduate from the Faculty of Dentistry, University of Toronto, Dr. Pitkin has held numerous positions in dental societies and is presently an Ontario governor representative to the CDA. He has a private practice in Scarborough, Ontario.

La séance dirigée par le Dr Gary Pitkin portera sur les aspects médico-légaux de la réanimation cardio-pulmonaire et touchera plusieurs questions sujettes à controverse ayant trait à la façon dont la réanimation est donnée par des personnes qualifiées. Diplômé de la Faculté de dentisterie, à l'Université de Toronto, le Dr Pitkin a occupé de nombreux postes dans les sociétés dentaires et, présentement, il représente, à titre d'administrateur, l'Ontario auprès de l'ADC. Il possède une pratique privée à Scarborough (Ontario).

Rapport du directeur général

Le Conseil exécutif de l'Association dentaire canadienne s'est réuni à Ottawa, les 13 et 14 novembre 1981. À titre de renseignements, nous vous en communiquons les principaux points.

CDSPI

Le Conseil exécutif a révisé et agréé la vérification des Régimes d'assurance pour les dentistes canadiens de 1978 à décembre 1980.

La firme Shoemaker-Deslauriers a été nommée vérificateur des régimes pour l'année civile 1981.

Les CDSPI étudient la possibilité d'obtenir de l'assurance contre les fautes professionnelles. On renseignera les associations provinciales le plus tôt possible à ce sujet.

Politique de l'ADC touchant l'indemnisation des dépenses

La politique actuelle touchant l'indemnisation des dépenses a été révisée par le Conseil exécutif qui a décidé d'allouer au plus 45\$ par jour pour les repas. Des directives plus précises ont été établies pour accepter les dépenses jugées raisonnables.

Régime d'assurance dentaire pour le personnel

L'ADC a demandé aux CDSPI d'établir un régime d'assurance dentaire à l'intention du personnel pour remplacer le régime actuel basé sur le principe de l'autofinancement. Ce régime entrera en vigueur le 1^{er} janvier 1982 et sera offert aux associations provinciales. Présentement, les CDSPI étudient un régime d'épargne-retraite pour remplacer le régime actuel.

Affaires gouvernementales

— *Expert-conseil supérieur*

— *Dentisterie — Santé et Bien-être social Canada*

L'ADC est représenté par le Conseil exécutif auprès du Comité de

sélection chargé de trouver quelqu'un pour remplir le poste d'expert-conseil supérieur en dentisterie, à Santé et Bien-être social Canada. Des entrevues auront lieu ce mois-ci et un communiqué sera fait sous peu.

— *Groupe de travail sur la pratique de l'hygiène dentaire — Santé et Bien-être social Canada*

L'ADC a appris que Santé et Bien-être social Canada vient de créer un groupe de travail sur la pratique de l'hygiène dentaire. Le Conseil exécutif a révisé le mandat et la composition de ce groupe. À son avis, le mandat est ambigu et il existe un manque d'équilibre certain dans la composition du groupe qui compte trois dentistes et huit hygiénistes. Un comité plus représentatif est souhaitable. Aussi encouragera-t-on les associations provinciales à faire connaître leur point de vue au Ministre de la Santé. L'ADC écrira au Ministère pour exprimer ses appréhensions à ce sujet.

— *Thérapeutes dentaires*

Le Dr Williams et le Conseil exécutif ont rencontré le sous-ministre pour s'entretenir au sujet du déménagement de l'École des thérapeutes dentaires et des inquiétudes qu'éprouvent en rapport avec ce sujet les thérapeutes dentaires des régions où le service n'est pas satisfaisant. Une fois de plus, l'ADC a déclaré au sous-ministre qu'elle pouvait offrir les effectifs dentaires nécessaires par l'intermédiaire des associations provinciales conjointement avec les directeurs régionaux. Nous avons appris que les directeurs régionaux du gouvernement fédéral se sont vu assigner comme tâche prioritaire de collaborer davantage avec les dentistes afin de participer plus étroitement à l'administration des soins dans ces régions.

L'École des thérapeutes est maintenant fermée et les membres du personnel enseignant sont affectés à

des travaux de recherche. Aucune décision n'a été prise touchant le déménagement de l'école. Entre-temps, l'ADC continue à faire connaître le point de vue des associations dentaires provinciales sur ce sujet et on s'attend à ce qu'une décision soit prise sous peu.

Le président de l'ADC rencontrera des représentants de la Fraternité nationale des Indiens pour leur expliquer notre position touchant l'amélioration des effectifs dentaires ainsi que nos préoccupations pour assurer des soins complets à tous les Canadiens.

— *Comité des questions fiscales*

Le Conseil exécutif a revu le rapport du Comité des questions fiscales et fera parvenir aux membres une lettre présentant un sommaire du dernier budget fédéral. Le Comité professionnel mixte (qui étudie comment améliorer les caisses de retraite avant l'acquittement des impôts) a tenu deux assemblées et est en train de se fixer un mandat. Des efforts sont faits pour obtenir la participation de l'Association du barreau canadien, de l'Association médicale canadienne et de l'Institut canadien des comptables agréés, avec chacun des groupes payant 2 500\$, pour assurer que soit efficace la manière d'étudier l'allègement fiscal pour les REER des professionnels.

Recrutement

Présidée par le Dr Utas, la campagne de recrutement de l'ADC est en bonne voie. Le 26 octobre 1981, des avis de renouvellement ont été envoyés en Ontario et au Québec. D'autres avis ont été postés le 1^{er} décembre. Au début de janvier, on a fait une étude de la campagne de recrutement pour déterminer les autres mesures à prendre.

La collaboration du Québec et de l'Ontario touchant le recrutement est

excellente. Les Drs Jean Laporte et Bradley Holmes s'entremettent pour mener une campagne téléphonique dans leurs provinces respectives. L'Association dentaire de l'Ontario a déjà offert son appui par l'intermédiaire de son Journal et on a demandé au Québec d'en faire autant.

Membres à perpétuité

Le Conseil exécutif a agréé comme membres à perpétuité:

W.A. McIvor de la Colombie-Britannique
J.A. Folkins de la Colombie-Britannique
W.L. Elliot de la Colombie-Britannique
J.A.M. Shields de l'Alberta
D.C. Gordon de la Nouvelle-Écosse

Certificats de mérite

Le Conseil exécutif a décerné des certificats de mérite aux personnes suivantes:

administrateurs:

E.F. Allison de l'Alberta
R.F. Evans de l'Ontario
A.J. Harris de l'Ontario
G. Maranda du Québec
L. Tomkins représentant des étudiants

membres des conseils et des comités:

P. Belisle (Soins de santé)
*G.A. Freeze (Education)
R. Headley (Congrès 1981)
W. Heaslip (Statuts et règlements)
A.E. Hoffman (Services hospitaliers)
F.A. Irwin (Représentant des Anciens Combattants)
C.L.B. Laval (Education)
J.W. MacKay (Conseil exécutif)
A.E. MacLeod (Services d'information)

J.H.P. Main (Services hospitaliers)

R.J. Sexton (Soins de santé)

Congrès 1981:

Mme G. Headley
B.H. Weeks
G.P. Greeves
L.G. Dugal
R.D. Odland
E.T.M. Geraldini
J.A. Derbyshire
N.S. Misura
R.F. Valentini

*décédé

Conseil éditorial

Le Dr A.E. MacLeod, de Halifax, a été réélu président du Conseil éditorial. Le Dr A.E. Sparrow, de Calgary, a été nommé membre du Conseil pour succéder au Dr Clyde Covit qui a occupé ce poste durant l'année qui a suivi son mandat de président de l'ADC.

Révision professionnelle

Les membres de l'Association dentaire de Terre-Neuve ont fait part de leur intérêt touchant la création d'un atelier sur la révision professionnelle. La bibliothèque et le centre de documentation de l'ADC ont déjà recueilli des renseignements sur ce sujet et les mettront à la disposition de toutes les sociétés affiliées. En retour, on demandera aux associations provinciales de fournir à la bibliothèque de l'ADC tout renseignement dont elle dispose et d'indiquer si elles désirent qu'un atelier ait lieu en 1982.

Congrès annuel

Le Conseil exécutif a reçu du Comité du congrès un rapport financier indiquant que le Congrès 1981 a été un succès. Le Conseil a adopté une résolution afin de transmettre de sincères félicitations à la Société dentaire de Calgary pour les efforts remarquables

qu'elle a déployés en organisant le Congrès 1981.

On a discuté la possibilité de tenir le congrès à Ottawa plus souvent, c'est-à-dire tous les deux ou trois ans, et les autres années, de travailler conjointement avec une association provinciale ou régionale. Une assemblée conjointe aura lieu à Toronto, en 1982, et il est possible qu'il y en ait une autre à Montréal pour le Congrès 1984.

FDI

Le Dr Utas a présenté un rapport sur le Congrès de la FDI qui s'est tenu à Rio de Janeiro. Ce rapport paraîtra dans le Journal de l'ADC dans le cadre d'une série d'articles préparés par le Dr G.S. Beagrie et le Brigadier général W.R. Thompson.

La campagne de recrutement de la FDI a eu lieu en janvier par l'intermédiaire du Journal et au moyen de formulaires de renouvellement postés aux membres actuels de la FDI. Les frais des membres de soutien pour l'année 1982 sont de 35\$ et, pour ceux qui désirent recevoir le Journal international, de 60\$ par membre, tout comme l'an dernier.

FCED

Le directeur général, qui agit également comme administrateur du Conseil du FCED, a présenté un rapport sur une assemblée spéciale du Conseil qui a été convoqué pour réviser l'aménagement du FCED à Ottawa. Au nom du Conseil exécutif, M. Drouin a offert au Fonds des bureaux au siège social de l'ADC, ce qui coïnciderait avec la retraite du directeur général du FCED, le 30 juin 1982. Cette proposition permettra au Fonds d'épargner la moitié de ses frais administratifs actuels, puisqu'il pourra faire appel au personnel et utiliser les locaux de l'ADC. Le détail de l'administration financière relèverait de l'ADC, tel que

le stipule l'acte fiduciaire du FCED. Cette disposition serait analogue à celle qui existait avant que l'ADC n'aménage à Ottawa, en 1977. À l'époque, le Conseil d'administration du FCED avait décidé de *ne pas* s'installer à Ottawa principalement parce qu'il désirait maintenir ses rapports avec les industries dentaires. M. Drouin a démontré que plusieurs fondations de charité canadiennes connaissent le succès sans être pourtant situées à Toronto.

Le Conseil exécutif a exprimé quelques réserves touchant la décision du Conseil d'administration du FCED.

L'AHDC —

Les pratiques indépendantes

Le Conseil exécutif a révisé le courrier reçu de l'AHDC. De l'avis du Conseil, les lois dentaires provinciales déterminent les fonctions des hygiénistes dentaires dans la pratique de la dentisterie. L'ADC sera prête à discuter avec l'AHDC une fois que celle-ci aura fait connaître sa position touchant les pratiques indépendantes.

On demandera au Conseil des soins de santé de préparer un rapport sur le rôle de l'hygiéniste dans la pratique dentaire. On a remarqué que la résolution adoptée lors de l'assemblée du Conseil d'administration en août 1981 et excluant les auxiliaires des assemblées de l'ADC, exigera un amendement aux règlements de l'ADC. À l'assemblée de mars 1982, on présentera une résolution touchant l'amendement en question. Entre-temps, les auxiliaires continuent d'être membres des conseils de l'ADC et peuvent y prendre part.

Adhésion aux groupes de spécialistes

Le règlement de l'ADC stipule que, pour être membre d'un groupe de spécialistes, tout dentiste doit être membre de l'ADC. Au Québec et en Onta-

rio, toutefois, tel n'est pas toujours le cas. À la suite d'une assemblée avec les représentants des groupes de spécialistes, le 30 août 1981, un moratoire a été posé touchant cette exigence afin de réviser le règlement et déterminer s'il est réaliste et pratique.

Agrément

On a posé un moratoire pour l'agrément des écoles des auxiliaires dentaires dans la province de Québec. Cette mesure permettra de pousser plus avant les discussions avec l'Association des chirurgiens dentistes du Québec au sujet de l'agrément dans les écoles où l'on enseigne des méthodes inacceptables au lieu de celles qui sont agréées par l'ADC.

ACNOR

Récemment, le Conseil des matériaux et dispositifs dentaires révisait le rapport préliminaire de l'Association canadienne de normalisation touchant un programme d'authentification qui doit être parrainé conjointement par l'ADC et l'ACNOR. Ce programme s'occupera de la normalisation des matériaux dentaires à travers le Canada et sera financièrement indépendant. De plus amples renseignements seront communiqués après la prochaine assemblée du Conseil.

Le Conseil exécutif a appris que M. Hubert Drouin a été nommé membre du Comité d'orientation de l'ACNOR affecté à la technologie des soins de santé. Cette nomination s'ajoute à celles de plusieurs membres du Conseil des matériaux et dispositifs dentaires qui composent le Comité technique de la dentisterie de l'ACNOR.

BNEDC

Le Conseil exécutif a reçu des renseignements touchant la possibilité pour le BNEDC d'étudier de façon exhaustive le programme d'agrément

de l'ADC. On a suggéré que ce projet soit discuté avec le Conseil d'éducation. On cherchera à obtenir d'autres renseignements du BNEDC qui sera invité à prévenir l'ADC, s'il a lieu, de réviser les formalités d'agrément.

Atelier des media

Avant de se réunir à Ottawa, le Conseil exécutif a participé à un atelier des media qui a duré deux jours. On a jugé cet atelier très profitable pour les membres qui, occasionnellement, sont appelés à représenter l'ADC auprès des media. On songe à développer d'autres ateliers du même genre et à y inviter les autres associations ou les groupes qui, au sein de la profession, pourraient y être intéressés.

Prochaines assemblées

Voici le calendrier des prochaines assemblées:

les 12 et 13 février 1982, assemblée précédant celle du Conseil exécutif, à Ottawa.

le 18 mars 1982, assemblée des chefs de service administratif et du président, à Ottawa (si nécessaire).

les 19 et 20 mars 1982, assemblée intérimaire du Conseil d'administration à Ottawa.

les 12 et 13 mai 1982, assemblée du Conseil exécutif à la suite du Congrès de l'ADO et de l'ADC, à Toronto.

le 23 septembre 1982, soit une journée avant l'assemblée annuelle du Conseil d'administration, assemblée des groupes de spécialistes, à Ottawa.

les 24 et 25 septembre 1982, assemblée annuelle du Conseil d'administration, à Ottawa.

Observation finale

Pour obtenir de plus amples renseignements sur les sujets ci-dessus, veuillez communiquer avec M. Hubert Drouin, au siège social de l'ADC.

Hubert Drouin
Directeur général

Jn vaccin contre la carie?

Un vaccin qui éliminerait les caries? Ce rêve est-il trop beau pour devenir une réalité?

Les chercheurs et les microbiologistes dentaires de l'Amérique du Nord déclarent avec optimisme que, l'ici cinq ans, il se peut qu'on ait créé un vaccin pour réduire de façon efficace les caries dentaires. Les plus optimistes disent qu'il faudra encore dix ans.

Selon le Dr John Stamm, du département de la Dentisterie communautaire de l'Université McGill, l'idée d'un vaccin buccal pour immuniser les humains contre les caries circule depuis au moins 1930. Cependant, c'est bien avant cette date que les chercheurs se sont penchés sur le premier problème de santé au Canada.

Les caries dentaires ne sont pas une maladie contemporaine.

Depuis les temps anciens jusqu'à tout récemment, on croyait que les caries étaient causées par des vers qui rongeaient les dents. En 1683, Antoni van Leeuwenhoek, inventeur du premier microscope qui ait quelque puissance, aperçut des "animalcules" en examinant des raclures de dent.

Des siècles de recherche sur les causes des caries et sur les moyens de les éliminer ont amené les chercheurs à dénoncer le sucre ainsi qu'à recommander une bonne hygiène buccale, la fluoruration de l'eau et des visites régulières chez le dentiste. Aujourd'hui, ils en sont à mettre au point un vaccin pour réduire les caries.

"Il s'agit d'un rêve très ancien," de déclarer le Dr Pierre Blais, spécialiste en matériaux et appareils dentaires au ministère de la Santé et du Bien-être. Selon lui, plusieurs laboratoires ont contemplé l'idée, mais peu en sont arrivés à quelque chose de concret.

Le vaccin buccal en est encore aux phases expérimentales. Le Dr John

Bozzola, professeur adjoint de microbiologie au Collège médical de la Pennsylvanie, a commencé à faire des recherches sur un vaccin il y a trois ans, grâce à une subvention annuelle de 25 000\$. Maintenant, il espère obtenir l'appui des industries pour pouvoir poursuivre ses travaux.

En injectant des substances pour stimuler les anticorps dans les glandes salivaires des rats, le Dr Bozzola a découvert que les caries étaient réduites d'environ 70 pour cent. Maintenant, il voudrait produire un vaccin pour les adolescents qui pourrait être administré dans le cadre d'un programme d'immunisation scolaire.

Pour être efficace, le vaccin doit être reçu quand une personne est jeune, a indiqué le Dr Bozzola. "Le plus tôt nous incitons l'organisme à produire des anticorps, le plus tôt les cellules bactériennes cessent d'adhérer aux cavités buccales. Il serait nécessaire que la première vaccination ait lieu vers l'âge de deux mois," a-t-il précisé.

Toutefois, les effets d'un tel programme d'immunisation, a-t-il poursuivi, ne commenceraient pas à se manifester avant six ou dix ans.

Par ailleurs, trois chercheurs de l'Institut national de recherche du Maryland étudient la possibilité d'immuniser les humains d'une autre façon.

Les Drs Cole, Bowen et Emilson ont infecté huit volontaires en leur faisant rincer la bouche avec une solution contenant des streptocoques mutagènes susceptibles de causer des caries. Après une période de surveillance à la fin de laquelle ils ont bien nettoyé les dents des sujets, ils ont "immunisé" ceux-ci en leur donnant des streptocoques mutagènes qui ne se trouvent pas normalement chez les humains. Puis, ils les ont infectés à nouveau.

Le Dr Cole a déclaré qu'à deux reprises différentes, les chercheurs ont découvert que moins de bactéries se formaient sur les dents des personnes "immunisées" que du groupe témoin.

Le Dr Cole et ses collègues sont encore en train d'analyser les données des premières expériences. C'est plus tard seulement qu'ils considéreront l'idée de mettre au point un vaccin pour protéger les humains pendant de plus longues périodes.

"Plusieurs questions restent irrésolues quant à l'effet du vaccin, telle la durée de la protection qu'il procure. Jusqu'à maintenant, son efficacité a été brève. Comparativement à la fluoruration de l'eau, nous ignorons combien efficace sera le vaccin contre la carie," a déclaré le Dr Cole.

Le Dr Jeffrey Hillman, chef du département de la génétique moléculaire au Centre dentaire Forsyth de Boston, a isolé un type génétiquement différent de mutant cariogène qui produit de l'acide. Cette nouvelle souche de "bonnes" bactéries produit moins d'acide.

"Nous suggérons d'utiliser cette nouvelle souche dans ce qu'il est convenu d'appeler thérapie supplétive pour combattre la souche ordinaire, a déclaré le Dr Hillman. Nous l'administrons à un bébé de six mois qui commence à percer ses dents. La souche ne causera pas de caries et il se peut qu'elle les élimine."

Tout comme la théorie du Dr Bozzola, celle du Dr Hillman exige que la souche de cette thérapie supplétive soit introduite dans l'organisme de l'enfant le plus tôt possible pour être efficace. Le Dr Hillman en est encore à faire des expériences sur des rats. Il doit ensuite faire des essais sur des singes avant de songer à passer à des volontaires humains.

Les Actualités

Le Dr Jim Sandham, de l'Université de Toronto, effectue des recherches suivant les mêmes principes. Il remplace, chez les animaux, la souche naturelle des streptocoques mutagènes par une souche non pathogène.

En poussant un pas plus avant, le Dr Sandham croit que de bonnes bactéries pourraient être implantées dans la bouche des bébés avant qu'ils n'atteignent 18 mois (avant cet âge, ils n'ont pas de bactéries causant de caries). Les bonnes bactéries combattent les mauvaises et les élimineront peut-être. Avec l'aide de deux étudiants diplômés et grâce à une subvention du gouvernement provincial, le Dr Sandham poursuit, depuis mars dernier, des expériences sur les façon de remplacer les mauvaises bactéries par des bonnes.

Tous les chercheurs interrogés sont persuadés qu'un vaccin buccal sera mis au point d'ici dix ans. La grande question qui se pose est de savoir si un tel vaccin éliminera les caries de façon définitive.

Le Dr Hillman croit que la solution qu'il propose le pourra. "La souche du traitement supplétif ne causera pas de caries et elle éliminera sans doute les caries pour la vie durant," a-t-il affirmé.

Les autres chercheurs sont moins optimistes.

Selon le Dr Bozzola, rien n'éliminera jamais totalement les caries de l'organisme humain. "Il est douteux que nous puissions les éliminer... Il y aura probablement une baisse remarquable des caries dentaires, mais l'élimination ne sera jamais définitive. J'envisage une baisse de 50 à 70 pour cent."

Le Dr Bozzola pense que le vaccin sera vraiment efficace seulement si l'on a recours aux moyens traditionnels de prévention comme la fluoruration, les soins appropriés et les bonnes habitudes alimentaires. "Pour éliminer presque complètement les caries, a-t-il ajouté, il faut ces mesures d'hygiène aussi bien que ces moyens de prévention."

Le Dr Cole partage cet avis. "Nous sommes tous optimistes avec prudence; un vaccin n'enraiera pas com-

plètement les caries. Il est clair que les restaurations dentaires en seront grandement diminuées mais nous avons découvert que les caries diminuaient de toute façon chez les gens que nous avons surveillés."

À son avis, la dentisterie est sur le point de changer, et ce, nonobstant tout vaccin. "Le vaccin ne rendra pas le dentiste inutile. Seulement, le dentiste devra s'orienter différemment," a-t-il dit.

Quant au Dr Blais, il croit que si un vaccin était mis au point pour les humains, il faudrait qu'il soit administré périodiquement par le dentiste et, comme tel, il constituerait "un traitement dentaire de plus dans la gamme dont on dispose déjà."

Pour le Dr Stamm et un chercheur de la Faculté de Dentisterie de l'Université de Toronto, il s'agit d'une question compliquée. Le grand problème est de prendre un vaccin qui a eu quelque succès chez les animaux et de l'administrer à des humains. Ce problème a mené les chercheurs "dans une route qui semble être sans issue," a commenté le Dr Stamm.

Le chercheur de l'Université de Toronto s'exprime différemment: "Le vaccin pour les rats n'a pas connu un succès fantastique. Mon sentiment est que nous sommes très loin du temps où nous mettrons au point un vaccin pour les humains... Je suis optimiste en tant que simple chercheur, mais pessimiste quant au délai nécessaire pour créer un vaccin pour les humains."

Comme l'ont fait remarquer les Drs Blais et Stamm, l'idée d'un vaccin buccal plane depuis longtemps. Dans ce domaine, les chercheurs peignent sans cesse un riant tableau, de dire le Dr Stamm, et d'ajouter le Dr Blais, cette bonne idée a été enfantée de nombreuses fois.

Qui sait? Un vaccin sera peut-être mis au point dans les prochaines années. Mais présentement, les gens doivent s'en remettre aux méthodes éprouvées en se brossant les dents, en utilisant la soie floche, en buvant de l'eau fluorée et en visitant régulièrement le dentiste.

Nomination — Dungy



Depuis peu, le Dr Arlington Franklin Dungy détient le poste de chef de la dentisterie à l'Hôpital pour enfants de l'Est de l'Ontario, à Ottawa, remplaçant le Dr David J. Kenny qui a été nommé dentiste en chef de l'*Hospital for Sick Children* de Toronto, en juillet 1981.

Diplômé de la Faculté de dentisterie de l'Université de Toronto, en 1956, et du département de l'anesthésie de l'Université de Londres, en 1967, le Dr Dungy agissait précédemment comme chef de la division de pédiodontie à l'*Hospital for Sick Children* de Toronto. De plus, il est le créateur du programme dentaire à l'intention des enfants handicapés au Centre médical de l'Université McMaster, à Hamilton.

Le Dr Dungy fait partie de plusieurs organisations professionnelles, y compris l'ADC, l'ADO, l'Académie canadienne de pédiodontie, l'Académie internationale de dentisterie pour les handicapés, la Société canadienne de dentisterie pour les enfants (chapitre de l'Ontario) et de la Fédération mondiale d'hémophilie. Actuellement, il est membre du Conseil exécutif et agit à titre de président du Comité affecté au programme pour le Sixième Congrès international de dentisterie pour les handicapés, à Toronto.

Vérification fiscale: sociétés de gestion et services

Récemment, Revenu Canada augmentait les impôts des sociétés de gestion s'occupant de la vérification des comptes ainsi que les impôts des professionnels faisant appel aux services de ces sociétés.

Sont visés les sociétés offrant des services de gestion aux dentistes de même que les dentistes recevant de tels services dans certains cas précis.

Selon Revenu Canada, certains honoraires imposés par les sociétés de gestion sont inacceptables et ne sont pas déductibles lorsqu'ils sont acquittés ou dus par un dentiste.

D'après la Loi de l'impôt sur le revenu, aucune déduction faite en fonction d'une mise de fonds ou d'une dépense ne peut être acceptée, sauf dans les cas raisonnables.

C'est pourquoi les dentistes devraient pouvoir déduire de leurs revenus tous les frais jugés raisonnables que leur imposent les sociétés de gestion.

Le Bulletin d'interprétation no IT-189 de Revenu Canada reconnaît cette possibilité, indiquant qu'une société est en droit d'obtenir un profit raisonnable pour les services qu'elle rend et qu'il est permis de déduire des revenus les sommes payées à une société par un praticien qui reçoit de tels services, à la condition que les frais en paraissent raisonnables relativement à la somme qu'une autre personne aurait à déboursier pour les mêmes services sur le marché libre.

Toutefois, dans certains cas, Revenu Canada semble vouloir appliquer des politiques arbitraires touchant la franchise des frais de gestion. Ces politiques peuvent être incompatibles avec les principes indiqués ci-dessus.

Les trois points suivants méritent l'attention.

1. En examinant certains comptes, Revenu Canada a déclaré qu'était inacceptable le procédé selon lequel une société de gestion acquitte le compte d'un dentiste, puis impose à celui-ci des frais basés sur le montant du compte.

Par exemple, si le compte d'électricité d'un dentiste est de 100\$ ou de 1 000\$, Revenu Canada refuse que les frais imputables au règlement de ce compte soient basés sur un pourcentage du montant qu'il porte, soit 15 pour cent de 100\$ ou 15 cent de 1 000\$ suivant le cas.

Selon Revenu Canada, c'est le service en lui-même — le temps, le matériel de bureau et les frais généraux qu'il nécessite — qu'on doit évaluer, et ce, indépendamment du montant du compte. Bien que le principe se défende, il reste que, nonobstant la méthode employée pour calculer le coût d'un service, si les frais de gestion paraissent raisonnables comparativement aux frais que quelqu'un d'autre sur le marché libre imposerait pour le même service, ces frais devraient être jugés acceptables.

2. Dans plusieurs cas, Revenu Canada a accepté comme règle de base et comme procédé pour déterminer le coût raisonnable d'un service rendu par une société de gestion, le coût du service plus 15 pour cent. Précisons que, dans ce cas, le coût du service comprend les frais généraux et les dépenses effectuées par la société de gestion en rapport avec le service, à l'exclusion des montants que doit acquitter le professionnel qui achète ce service, comme les montants des comptes d'électricité ou des autres comptes acquittés par la société en son nom.

Il y a quelques années, la Cour fédérale du Canada prononçait un arrêt touchant un cas d'impôt et, suivant les faits et circonstances de ce cas, jugeait raisonnable un pourcentage de 15 pour cent pour établir le coût d'un service. Cet

arrêt n'exclut pas la possibilité qu'un pourcentage plus élevé paraisse raisonnable dans des circonstances particulières.

Pour trancher la question, on se demandera quel serait le prix exigé par une société de gestion concurrentielle pour le même service rendu à n'importe quel client et quel prix un tel client paierait sur le marché libre.

On notera que les services qui, comme la location de biens ou d'équipements appartenant à une société de gestion, sont différents des services de caractère strictement personnel, seront soumis aux mêmes genres d'examens pour voir s'ils sont acceptables. Revenu Canada étudiera le marché libre à ce sujet. Toutefois, le pourcentage de 15 pour cent s'applique seulement aux services personnels et non à la location de biens ou d'équipements appartenant à une société de gestion.

3. Si la déclaration d'impôt d'un dentiste est réévaluée parce que certains frais que lui impose sa société de gestion, 100\$ par exemple, paraissent entièrement irraisonnables, et que, par conséquent, ces frais ne soient pas déductibles, le dentiste en question est, en général, obligé d'acquitter les frais de 100\$ à la société qui, en retour, doit déclarer cette somme dans ses revenus.

Cette mesure crée de réels problèmes pour les contribuables visés et impose aux sociétés de gestion d'être précises et raisonnables dans l'établissement des frais attachés à leurs services.

Dans le passé, Revenu Canada a pu accepter des redressements raisonnables pour fins d'impôt tant pour les professionnels que pour les sociétés de gestion. Malheureusement, il ne faut plus compter sur cette disposition.

Cet article a été préparé par les avocats et courtiers, McMillan et Binch.

Les Actualités

Aimez-vous l'aventure?

L'an dernier, les soins dentaires à l'intention des autochtones canadiens ont fait l'objet de discussions sérieuses et des efforts ont été déployés pour amener plus de dentistes à aller pratiquer dans les régions les moins favorisées du pays.

Dans ce but, l'Alberta, le Québec, l'Ontario et la Nouvelle-Écosse ont recueilli les noms des dentistes intéressés. Les résultats se sont révélés très encourageants pour toutes les parties en cause et, présentement, des mesures sont prises pour établir un programme et le mettre en application. Cependant, il faut s'attendre à quelque lenteur, étant donné qu'il faut tenir compte de plusieurs facteurs et s'assurer à l'avance que le programme sera un succès. Quelques essais ne présenteront aucune difficulté, mais d'autres confineront à la catastrophe. L'un des problèmes à résoudre est la bonne initiation des dentistes au mode de vie et aux usages des Indiens vivant dans des réserves. Cet article a justement pour objet de faire quelque lumière sur ce sujet.

Transport

Étant donné que plusieurs réserves indiennes du Canada sont situées relativement près des centres urbains, la majorité des autochtones obtiennent leurs soins dentaires des praticiens privés locaux. Aussi est-il possible qu'on vous demande d'aller dans une communauté très éloignée. Air Canada ne desservant pas ces régions, vous devrez vous attendre à devoir emprunter un avion ne comprenant pas plus de quatre à vingt places. Il est même probable qu'une partie de l'espace sera utilisée pour transporter des marchandises diverses, y compris sans doute l'équipement dentaire portatif que vous utiliserez là-bas. Si votre voyage s'effectue l'hiver, il convient de vous vêtir très chaudement: la plupart des appareils sont plutôt mal chauffés et laissent passer l'air.

Pour votre premier voyage, je vous recommande fortement d'exiger qu'un membre des Services médicaux

qui connaît les habitudes cliniques et la vie de ces communautés lointaines vous accompagne.

Une fois que vous serez parvenu à destination, il se peut qu'une infirmière, un agent médical de la communauté ou un gardien vienne à votre rencontre, mais n'y comptez pas. Si personne n'est là pour vous accueillir, vous devrez vous rendre immédiatement au poste médical. Il vous appartiendra de découvrir où il se trouve et de vous y rendre par les moyens dont vous pourrez disposer, ce qui, dans certains cas, voudra dire à pied.

Relations dans les réserves

Après avoir rencontré les membres du personnel médical, je vous conseille fortement d'aller rendre visite au chef de la réserve afin de vous faire connaître. Ce faisant, rappelez-vous sans cesse que vous serez un invité dans sa réserve et qu'il a le pouvoir de demander à quiconque de partir.

Ensuite, il faudra que vous visitiez l'école et en rencontriez le principal, étant donné que c'est probablement là que vous établirez votre clinique et que vous aurez besoin de la collaboration des professeurs. Souvenez-vous que les écoliers seront vos patients.

Il sera bon que vous rencontriez les gardiens de l'école et du poste médical. Ils pourront souvent vous dépanner lorsque vous aurez des problèmes d'équipement. Le dernier mais non le moindre, l'agent médical de la communauté pourra se révéler une excellente relation qui vous présentera à la communauté en général.

L'espace clinique

Chassez toute illusion de grandeur à ce sujet, car les installations ne ressembleront nullement à votre cabinet. Comptez seulement sur une seule pièce qui sera située dans l'école, au poste médical ou dans les locaux des musiciens. Sauf quelques rares exceptions dans les régions les plus reculées, la pièce sera équipée d'un lavabo avec eau froide et eau chaude.

Logement

En principe, vous pourrez compter sur une caravane qui se trouvera près du poste médical et qui constituera votre logement pendant votre séjour

là-bas. Elle comprendra un vivoir, une cuisine, une salle de toilette et deux ou trois chambres à coucher. Il faut vous attendre à devoir partager ce logement avec diverses personnes y compris un assistant dentaire qui pourra vous accompagner, un médecin de passage ou d'autres membres du personnel médical. Le poste médical vous fournira les vivres, mais il est probable que vous devrez préparer votre propre cuisine. Quiconque habite la caravane est censé en faire le ménage avant son départ.

Le poste médical vous servira probablement le déjeuner et, parfois, le dîner. Il est bon de vous renseigner à l'avance sur le régime de la réserve que vous visiterez: si on n'y trouve pas d'alcool, ayez le bon sens de ne pas en apporter avec vous.

Équipement et provisions

Nous savons tous combien est dispendieux l'équipement dentaire. Il appartient aux Services médicaux de fournir des soins aux centaines de réserves indiennes. Plusieurs de ces communautés n'obtiennent pas plus de six à huit semaines de services dentaires par année. C'est pourquoi il n'est pas possible économiquement d'établir des cliniques avec un équipement permanent dans toutes les régions. Pour cette raison, les Services médicaux utilisent un équipement portatif. Vous pouvez donc vous attendre à en trouver un qui comprendra un réservoir d'eau, un appareil de succion, deux pièces à main pour grandes vitesses, une pour vitesses réduites, une seringue à triple usage et une lampe optique. Suivant les circonstances, la chaise pourra être aussi bien un simple modèle portatif pliable qu'un fauteuil à dossier réglable automatique. En général, les lieux sont équipés de façon permanente d'un stérilisateur, d'un vibreur pour amalgame et d'un compresseur, mais il arrive souvent que le compresseur ait été "emprunté" pour un autre usage. On vous fournira une trousse d'instruments manuels, mais elle ne comprendra pas nécessairement ceux de votre choix. Si donc vous tenez à un modèle particulier de pince, vous fe-

z bien d'emporter le vôtre avec vous. La boîte aux provisions comprendra tous les produits de consommation fondamentaux. La variété en sera nécessairement limitée mais acceptable dans la plupart des cas. Ce ne sont pas tous les endroits qui disposent d'un équipement radiographique.

Culture

Vous découvrirez rapidement que vous êtes dans un environnement entièrement différent de ce que vous attendiez. Pour la communauté en général, le temps ne sera pas un facteur aussi important qu'il l'est pour vous. Aussi ne vous attendez pas à ce que les rendez-vous soient respectés de façon scrupuleuse. Votre principal souci sera de fournir des soins aux colliers, ce que vous pourrez planifier avec le concours des professeurs suivant les besoins. Habituellement, vous vous occuperez des enfants de 9h à 15h30, puis des adultes jusqu'à 17h. Il est probable que le principal n'aimera pas que vous fassiez attendre des adultes dans les couloirs de l'école pendant les heures de classe.

Veuillez noter qu'il est absolument nécessaire d'obtenir des parents ou tuteurs un formulaire de consentement signé avant de soigner les enfants. Ordinairement, cette formalité est remplie à l'avance et, dans les dossiers de la clinique, vous trouverez le formulaire de consentement attaché au dossier dentaire du patient.

On vous exhorte fortement à ne pas résister à un enfant qui se montre indocile. Le peuple indien n'éduque pas nécessairement les enfants comme nous le faisons et il n'accorde pas la même importance que les citoyens aux soins dentaires. Plusieurs communautés indiennes ont déjà été souvent visitées par le dentiste; certaines expériences ont été heureuses, d'autres moins. Il faudra vous rappeler que vous serez à l'essai jusqu'à ce que vous ayez traité quelques patients, puis votre réputation se répandra vite dans toute la communauté.

Vous vous apercevrez sans doute que les gens âgés hésitent à poser des questions. Prenez le temps de vous renseigner sur leurs problèmes. Cer-

tains ne savent pas s'exprimer en anglais. Ce cas est fréquent et il vous faut alors recourir au service d'un interprète. Il faudra avoir soin de bien choisir vos mots pour éviter les mésententes. Par exemple, on ne doit pas parler de "pratique privée". Très souvent, cette expression voudra dire que vous êtes un apprenti et n'avez pas encore les qualifications requises.

Au fur et à mesure, vous en apprendrez davantage sur la culture des autochtones et vous trouverez certainement qu'il s'agit d'une expérience fascinante. Vous verrez quel est le mode de vie de ces gens et, à n'en pas douter, vous en viendrez à apprécier davantage le rang que vous occupez dans la société.

L'état de santé buccale

Suivant le nombre de services que la communauté aura reçus auparavant, vous découvrirez combien les autochtones ont grand besoin de soins dentaires. Le taux des dents cariées, absentes ou obturées est généralement de 8 à 11 (ceux des enfants de Toronto est de 1-1) et vous pouvez vous attendre à être grandement surpris. Si l'occasion s'en présente, n'hésitez pas à donner des cours d'éducation dentaire. Si l'école est disposée à établir un programme de prévention pour encourager les élèves à se brosser les dents et à se rincer la bouche régulièrement, prenez le temps d'y participer avec les Services médicaux qui fourniront les provisions nécessaires. Si la demande de soie floche vous paraît considérable, ne vous en étonnez pas. Les autochtones font flèche de tout bois et se servent de cette soie pour coudre leurs mocassins. Ne criez donc pas victoire trop tôt!

Le poste médical pourra vous fournir une liste des patients gravement malades. Gardez-la sous la main à la clinique. N'essayez pas de jouer les héros. Il existe des moyens pour diriger les cas graves vers les centres importants quand les circonstances indiquent que les soins sur place seraient dangereux. En cas de problème, vous devez consulter l'infirmière en chef ou appeler le Bureau régional des Services médicaux.

Généralités

Je n'ai pas l'intention de fournir des détails touchant l'administration générale de ce programme. Celui-ci variera selon les dispositions prises entre les Services médicaux et votre association dentaire provinciale. Je vous conseille seulement de vous renseigner sur les dispositions touchant:

1. le transport
2. les horaires des cliniques
3. les méthodes de rapport
4. les modes de paiement
5. les assurances
6. les annulations de clinique qui sont inévitables
7. les indemnités pour les empêchements causés par les conditions météorologiques.

Il est sage de se renseigner sur tous ces sujets avant de partir.

Conclusion

Cet article ne tente nullement de décourager les personnes intéressées à participer au programme. Plusieurs n'ont tout simplement pas l'étoffe qu'il faut pour aller travailler dans ces régions. Pour ceux qui le peuvent cependant, j'espère avoir présenté un aperçu réaliste de la vie qui les attend là-bas. Les difficultés sont moindres dans les réserves situées près des centres urbains et elles augmentent à mesure qu'on gagne les régions désolées des Territoires du Nord-Ouest.

Je vous invite à vous renseigner davantage sur ce programme pour en juger vous-même. Après tout, il y a plus à découvrir quand on part à l'aventure que quand on se confine aux quatre murs de son cabinet. Il est possible qu'une toute nouvelle carrière s'ouvre à vous.

Dernièrement, je lisais un article et y trouvais ces observations que je peux faire miennes et offre en guise de conclusion: "Personne ne peut vivre longtemps dans le Nord sans être profondément influencé par sa complexité et sa simplicité. Tout le superficiel, le superflu et l'inutile sont éliminés pour jamais de votre vie. De fait, l'Arctique change votre destinée." L'invitation est lancée!

Cet article a été préparé par le Dr W. R. Bedford.

Statistiques

Suivant les dernières statistiques, il y a 11 095 dentistes diplômés travaillant à plein temps ou à temps partiel au Canada.

Ils sont répartis par importance numérique comme suit: 4 510 en Ontario, 2 469 au Québec, 1 658 en Colombie-Britannique, 1 027 en Alberta, 439 au Manitoba, 322 en Saskatchewan, 309 en Nouvelle-Écosse, 183 au Nouveau-Brunswick, 110 à Terre-Neuve, 40 dans l'Île-du-Prince-Édouard, 16 dans les Territoires du Nord-Ouest et 12 au Yukon.

On compte 41 spécialistes de la santé publique à travers le pays: deux à Terre-Neuve, un au Nouveau-Brunswick, onze au Québec, 26 en Ontario et un au Manitoba.

Le nombre des spécialistes en endodontie s'élève à 73: l'Ontario en a 29, le Québec 19, la Colombie-Britannique 12, l'Alberta sept, le Manitoba quatre et la Nouvelle-Écosse deux.

Parmi les 208 spécialistes diplômés en chirurgie dentaire, 98 se trouvent en Ontario, 40 au Québec, 26 en Colombie-Britannique, 16 en Alberta, dix au Manitoba, neuf en Nouvelle-Écosse, quatre en Saskatchewan, trois au Nouveau-Brunswick, un à Terre-Neuve et un dans l'Île-du-Prince-Édouard.

Il y a 18 pathologistes buccaux: sept sont en Ontario, cinq au Québec, trois en Alberta, un en Colombie-Britannique, un en Nouvelle-Écosse et un en Saskatchewan.

On dénombre 402 orthodontistes dont 185 pratiquent en Ontario, 76 au Québec, 58 en Colombie-Britannique, 40 en Alberta, 14 au Manitoba, dix en Nouvelle-Écosse, huit en Saskatchewan, sept au Nouveau-Brunswick, trois à Terre-Neuve et un dans l'Île-du-Prince-Édouard.

Des 120 spécialistes en pédodontie, 46 résident en Ontario, 29 au Québec, 16 en Colombie-Britannique, 14 en Alberta, sept au Manitoba, six en Nouvelle-Écosse et deux en Saskatchewan.

Plus de la moitié des 150 spécialistes en parodontologie, soit 78, se trouvent en Ontario, 20 sont au Québec, 18 en Colombie-Britannique, 14 en Alberta, huit au Manitoba, sept en Nouvelle-Écosse, quatre en Saskatchewan et un au Nouveau-Brunswick.

Parmi les 109 prothésistes, le plus grand nombre se trouve au Québec qui en a 36, l'Ontario en compte 29, la Colombie-Britannique 19, l'Alberta 12, la Nouvelle-Écosse six, le Manitoba quatre et la Saskatchewan trois.

On compte quinze spécialistes diplômés en radiologie buccale, dont six en Ontario, cinq au Québec, un au Manitoba, un en Saskatchewan, un en Alberta et un en Colombie-Britannique.

Le nombre total des spécialistes dentaires s'élève à 1 136: 504 pratiquent en Ontario, 241 au Québec, 151 en Colombie-Britannique, 107 en Alberta, 49 au Manitoba, 41 en Nouvelle-Écosse, 23 en Saskatchewan, 12 au Nouveau-Brunswick, six à Terre-Neuve et deux dans l'Île-du-Prince-Édouard.

Impôt

Pour répondre aux nombreuses demandes reçues, l'ADC présente à nouveau un sommaire des dispositions actuelles touchant les déductions d'impôt pour les frais associés à l'éducation permanente.

Il est permis de déduire de ses revenus toutes les dépenses raisonnables liées à un cours permettant à un professionnel de mettre ses connaissances à jour pour mieux exercer sa profession.

À ce sujet, Revenu Canada pose deux critères. Le premier vise justement à déterminer si le cours permet à l'élève de rafraîchir ses connaissances ou de les mettre à jour. S'il s'agit d'un cours portant sur une nouvelle matière pour l'élève, les dépenses n'en sont pas déductibles.

Cependant, les cours en éducation permanente à l'intention des dentistes

n'entrent pas dans cette catégorie des dépenses qu'ils occasionnent sont déductibles.

Le second critère de Revenu Canada a pour but de déterminer si les dépenses liées aux cours en éducation permanente sont raisonnables et dans quelles mesures elles le sont. Plusieurs facteurs sont en cause ici:

1. L'endroit où se donne le cours: les frais de déplacement pour un cours qui se donne en dehors de la région où habite l'élève seront déductibles seulement si le cours n'est pas offert dans cette région.
 2. La durée du cours: la durée normale d'un cours dont les frais seront déductibles sera de deux à trois semaines.
 3. Les jours où il ne se donne pas de cours: aucune dépense n'est déductible pour les jours où il n'y a pas de cours, sauf pour le jour d'arrivée et celui du départ. Les dépenses effectuées le samedi et le dimanche sont acceptées quand il y a cours le vendredi précédent et le lundi suivant.
 4. Les congrès: un congrès ne constitue pas un cours de formation même si les conférences qui s'y donnent sont de véritables cours.
 5. Les professionnels qui sont des employés: pour un employé, n'existe, au sujet de l'éducation permanente, aucune autre disposition que la déduction des frais de scolarité.
 6. Les dépenses personnelles ou jugées déraisonnables: Revenu Canada pourra s'objecter aux dépenses effectuées pour des cours suivis dans des endroits éloignés ou quand il y a des jours fériés. Si dans ce cas, le cours a été bref et qu'il a été suivi de vacances personnelles, Revenu Canada refusera, en tout ou en partie, les dépenses déclarées parce qu'elles sont de caractère personnel.
- Cet exposé n'est qu'un sommaire de la Loi de l'impôt sur le revenu touchant l'éducation permanente. Le lecteur est prié de se renseigner d'avantage en s'adressant à Revenu Canada ou à son conseiller fiscal.

En bref —

L'Association dentaire américaine est retirée officiellement de la Fédération dentaire internationale le 31 décembre 1981.

Le Conseil d'administration de l'ADA a adopté une résolution dans ce but, lors de son assemblée annuelle en octobre dernier.

Depuis quelque temps, l'ADA demandait une répartition plus équitable des frais de cotisation, mais elle n'obtenait aucune satisfaction.

Voici un extrait de l'*Amalgam*, bulletin officiel de l'Ordre des dentistes du Québec. Le président, le Dr Jean-Guy Landry, y met les dentistes en garde contre les problèmes de publicité:

"Puisqu'il est dit que "l'ignorance de la loi n'excuse pas", notons que depuis quelques mois un nombre important de plaintes sont adressées à l'Ordre à l'effet que certains dentistes, ont plusieurs nouveaux gradués, ont paraître des annonces publicitaires en complète dérogation aux règlements de l'Ordre et, de plus, à caractère manifestement commercial, et ce, présumément dans l'intention d'exercer un vulgaire maraudage de clientèle chez les confrères... J'ose croire que les auteurs de tels procédés ont certainement agi en méconnaissance de cause sans réaliser pleinement les conséquences de leur geste. À ceux-là, ainsi qu'à ceux qui auraient l'intention de surenchérir en les imitant, je demande formellement de faire preuve de professionnalisme et, en cas de doute quant à l'étendue de la publicité permise, je suggère à ces confrères de relire leur règlement sur la publicité...

D'après une récente enquête effectuée par des agents de l'ADA, les services dentaires dans les magasins à rayons ont augmenté de 80 pour cent depuis 1980. L'enquête a dénombré

63 services établis dans 18 magasins et trois pharmacies à succursales multiples.

Une enquête semblable menée en 1980 avait dénombré 35 services dentaires répartis dans dix magasins et une pharmacie à succursales multiples. Ces services se trouvent maintenant dans 14 états et dans le *District of Columbia*. L'an passé, ils étaient répartis dans dix états et dans le *District of Columbia*.

Dans un bulletin publié récemment, l'Association des Facultés dentaires du Canada annonce que le Dr Christian Mouton a plusieurs travaux de recherche en cours.

Le Dr Mouton a reçu une subvention de 56 250\$ du conseil de la recherche médicale du Canada pour étudier le rapport entre les antigènes d'enveloppe des streptocoques buccaux du groupe H, sérotype 1, et des bactéroïdes gingivaux, et l'adhérence interbactériennes. Grâce à une subvention de 12 000\$ de la firme Hoffman — Laroche Ltd, il étudie également l'effet de la gomme à mâcher au xylitol sur l'hygiène buccale.

Parmi les autres recherches, notons les suivantes: le Dr Ian Hamilton, de l'Université du Manitoba, étudie les propriétés biochimiques des agents pathogènes; le Dr Stephen Ahing étudie la cinétique des mastocytes dans les os et les articulations; le Dr Brock Love étudie les émissions radioactives et les céramiques pour usage dentaire; le Dr Peter Williams effectue des recherches sur les moyens d'alléger les surcharges des implants et sur la réactivité des alliages de restauration pendant les coulées; le Dr Ian Rollo essaie d'établir des méthodes pour analyser les cellules souches des tumeurs humaines afin d'améliorer le plus possible la chimiothérapie des personnes souffrant du cancer; et le Dr Algeron Karim étudie les effets du diabète sucré sur la formation des tissus dentaires durs.

Les Drs T. Chin Quee, E.C. Chan, C. Clark et R.F. Harvey, de l'Université McGill, ont obtenu une subven-

tion pour mener des recherches sur les effets du traitement adjuvant pour les maladies parodontaires.

Santé et Bien-être social Canada a récemment annoncé qu'on avait agréé onze subventions pour la recherche sur la santé, le tout s'élevant à 19 2287\$. Le Dr Murray Hunt et M. Alan Gray, de l'Université de Toronto, ont obtenu 15 000\$ pour préparer une enquête sur la santé dentaire des adultes canadiens et sur les soins dont ils ont besoin. Cette enquête sera utile aux gouvernements provinciaux et à d'autres ministères pour planifier les effectifs et les services dentaires. Elle a été recommandée par le Collège royal des dentistes du Canada. L'Association canadienne des Facultés de Dentisterie et un groupe de travail de Santé et Bien-être social Canada.

Suivant l'Association dentaire américaine, le programme fédéral de subvention pour la fluoruration, qui a pris fin en septembre 1981, a été couronné de succès.

Dans le cadre de ce programme, 765 localités comprenant près de onze millions de population et 133 écoles groupant 46 550 écoliers ont eu leurs réserves d'eau fluorées. Au cours des trois années qu'a duré le programme, il en a coûté moins d'un dollar pour chaque personne qui a bénéficié des services offerts.

Actuellement, le Conseil de la santé dentaire et de la planification de la santé de l'ADA recommande aux sociétés dentaires locales de consulter le directeur dentaire de leur état afin de mettre au point un plan pour promouvoir la fluoruration de l'eau, et ce, avant de solliciter l'appui du gouvernement.

L'Association des spécialistes en parodontologie du Québec a élu un nouveau Comité exécutif qui se compose comme suit: le Dr Samuel Galperin, président; le Dr Jean-Pierre Masson, vice-président; le Dr Edward Shore, trésorier; et le Dr Gordon Williams, secrétaire. Le président sortant est le Dr Marvin Stutman.

Bacteroides Species and Gelatinase-Producers in Periodontal Disease

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INTRODUCTION

Recent studies have shown qualitative differences in bacteria in various types of periodontal disease^{1,2,3}. For example, in terms of cultivable micro-organisms, Slots⁴ found gram-negative anaerobic rods to be predominant (75 per cent) in advanced periodontitis. They included *Bacteroides melaninogenicus* (probably *B. asaccharolyticus*) and fusiform organisms (probably *Fusobacterium nucleatum*). On the other hand, Williams *et al.*⁵ found the predominant organisms in moderate to severe periodontitis to be gram-positive rods the majority of which were *Actinomyces*. Gram — negative rods were the second largest group isolated, with *Bacteroides* and *Fusobacterium* being dominant.

With respect to periodontosis, Newman and Socransky⁶ found that samples obtained from pocket sites consisted of significantly increased proportions of gram-negative anaerobic rods when compared with a predominantly gram-positive flora in the control sites. Many of these organisms could not be classified. The accumulated data, as illustrated above, suggest that specific organisms, or groups of organisms, are associated with different forms of periodontal disease although the findings are not always consistent as shown by the work of Williams *et al.*⁵ However, little is known of the numerical relationship of cultivable physiological groups of bacteria (as contrasted to taxonomic groups) to periodontally diseased sites in humans.

In this paper, the investigation on the occurrence of two selected groups of bacteria in clinical cases of periodontal disease is reported. One group studied was the *Bacteroides* group comprising *B. melaninogenicus* and *B. asaccharolyticus* (or *B. gingivalis*). It is implicated in periodontal disease because *Bacteroides* strains produce a wide variety of toxic substances and lytic enzymes such as collagenase, deoxyribonuclease, endotoxin, H₂S, and NH₃. Another group consisted of gelatinase-producers since proteolytic bacteria have been found in plaques associated

with periodontitis³. Such bacteria are considered important because acid pH denatures collagen, making it susceptible to other less specific proteases. The acid pH condition can result easily from the presence of organic acids produced by the fermentation activities of anaerobic bacteria present in periodontal pockets. Thus collagenase may not be necessary to initiate destruction of connective tissue.

MATERIALS AND METHODS

Selection of patients

Patients were selected from the Montreal General Hospital Dental Clinic. They were in good medical health and not on any medication, such as antibiotics for the previous six months. Periodontitis patients were on their first visit to the clinic and had no recent dental treatment. After examination and sampling of all patients, photographs and radiographs were taken. Sixteen adult periodontitis patients and 12 healthy control subjects were studied.

Collection and treatment of specimens

At each sampling site supragingival plaque was removed with a curette and discarded to minimize contamination. The area was rinsed with water, dried with a air syringe and isolated with sterile cotton rolls. The subgingival plaque was collected with a fine curette which was inserted as deeply as possible into the pocket. After collection of the specimen the depth of the pocket was measured.

Two sites were chosen for testing for each patient. They were the mesiobuccal of the upper left first bicuspid, 24, and the distolingual of the lower right first molar, 46. In periodontitis patients, both sites were involved areas but the severity of site 46 was usually more pronounced. In the few exceptional cases where tooth No. 24 or No. 46 was not the most actively diseased, another tooth exhibiting the most diseased condition was selected. (The sites were predetermined because these areas are notoriously difficult

ult to clean and therefore are of poor oral hygiene with plaque usually evident. Furthermore, the same sites could be sampled with control healthy subjects.)

The specimens were processed separately and not pooled. After collection, they were immediately inoculated into an anaerobic fluid transport medium developed by Williams, *et al.*⁵ and taken to the laboratory for bacteriological analysis. Prior to culture, the samples were dispersed in an ultrasonic cleaner (Branson Model) HD-150, Heat Systems Co., Melville, N.Y.) for 20 seconds and then thoroughly mixed in a vortex mixer. This method of dispersal is gentler than with a regular ultrasonic disintegrator.

One ml of each sample was serially diluted in the anaerobic transport medium and aliquots of each dilution were spread on appropriate differential media. All manipulations were carried out in screw-capped prescription bottles under a stream of gas (90 per cent argon, 10 per cent hydrogen, 5 per cent carbon dioxide).

Differential media

All differential media used were prereduced, anaerobically sterilized and were in screw-capped prescription bottles prepared according to the anaerobic method of Chan, *et al.*⁷

Brain heart infusion blood agar medium enriched with vitamin K and hemin was used for the enumeration of the total cultivable flora. On this medium *Bacteroides melaninogenicus* (comprising subspecies *melaninogenicus* and *intermedius*) and *B. asaccharolyticus* were identified easily by their black pigmentation.

Gelatinase-producers were detected on gelatin-agar medium which was flooded with a protein precipitant (acid mercuric chloride) after growth to reveal clear zones of hydrolysis⁸. All manipulations were carried out anaerobically under a stream of gas as before.

Identification of pure cultures

The identification of subspecies distribution of *B. melaninogenicus* (including *B. asaccharolyticus*) and genus distribution of anaerobic gelatinase-producers isolated from periodontitis cases was carried out according to taxonomic schemes in the Anaerobe Laboratory Manual⁹. Standard fermentation tubes were used in the anaerobic glove-box (Coy Laboratory Products, Inc., Ann Arbor, Michigan) for the determination of sugar reactions. Analysis of fermentation organic acids was performed with a Capco gas-liquid-chromatography apparatus (Capco Clinical Analysis Products Co., Sunnyvale, California).

RESULTS

Fig. 1 shows the recovery in per cent of the total cultivable flora (TCF) of *B. melaninogenicus* (includes *B. asaccharolyticus* here and elsewhere hereafter) at two sites (24 and 46) in control (healthy) and periodontitis patients. As

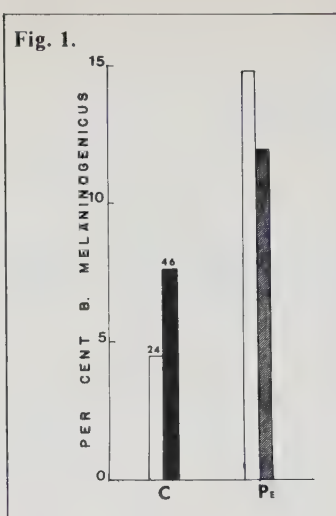


Figure 1. Recovery in percent of the total cultivable flora of *Bacteroides melaninogenicus* at two sites (teeth nos. 24 and 46) in control healthy subjects (C) and in periodontitis patients (Pe).

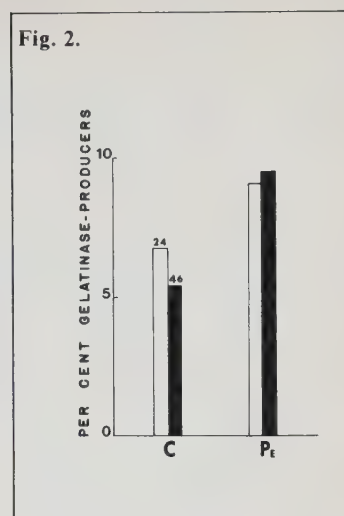


Figure 2. Recovery in percent of the total cultivable flora of anaerobic bacterial gelatinase-producers at two sites (teeth nos. 24 and 46) in control healthy subjects (C) and in periodontitis patients (Pe).

may be seen, at both sites, the per cent recoveries of the bacterium seemed higher in periodontitis patients than in healthy control subjects. Similarly, Fig. 2 shows the recovery in per cent of the TCF of gelatinase-producers at the same two sites in control and in periodontitis subjects. Again, the incidence of these bacteria was apparently higher in affected patients than in control subjects at the two sites of 24 and 46.

However, an analysis of the data of per cent bacteria recovered by a computerized T test procedure showed that recoveries of *B. melaninogenicus* and gelatinase-producers were only apparently higher (as shown by the graphs of Figs. 1 and 2) in patients with periodontitis than in healthy subjects. In fact, there is no significant difference at the 95 per cent level of confidence in *B. melaninogenicus* for site 24 between cases ($P > T = 0.1554$) and controls ($P > T = 0.2011$); nor is there a significant difference of the organism for site 46 between cases ($P > T = 0.8637$) and controls ($P > T = 0.8632$). Similarly, there is no significant difference in gelatinase-producers for site 24 between cases ($P > T = 0.7041$) and controls ($P > T = 0.6881$) nor for site 46 between cases ($P > T = 0.1137$) and controls ($P > T = 0.1362$).

Pure cultures of the anaerobic bacteria that could be isolated from periodontitis patients and serially cultivated were studied taxonomically. The strains of *B. melaninogenicus* were classified on the basis of fermentation of glucose and lactose, production of indole and specific organic acids (propionic, isobutyric, n-butyric, and succinic acids). Twenty-one strains of black-pigmented *Bacteroides* were classified as shown in Table 1, and of these, 38 per cent were identified as *B. asaccharolyticus* (or *B. gingivalis*), 52 per cent as *B. melaninogenicus* subsp. *melaninogenicus* and 10 per cent as *B. melaninogenicus* subsp. *intermedius*.

Table 1
Strain Distribution of Black-Pigmented *Bacteroides*
Isolated and Cultivated

Strain	No. of Strains	Percentage
<i>B. asaccharolyticus</i>	8 of 21	38
<i>B. melaninogenicus</i> subsp. <i>melaninogenicus</i>	11 of 21	52
<i>B. melaninogenicus</i> subsp. <i>intermedius</i>	2 of 21	10

Table 2 shows the kinds of gelatinase-producers identified of the 49 strains that could be isolated in pure culture and propagated. The largest numbers of gelatinase-producers were Gram-positive anaerobic bacteria belonging to the genera *Staphylococcus*, *Streptococcus*, *Propionibacterium*, and *Arachnia*.

Table 2
General Distribution of Gelatinase-Producers
Isolated and Cultivated

Morphology	Gram reaction	Genus	No. isolates (of 49 identified*)
Cocci	+	<i>Peptococcus</i>	5
		<i>Staphylococcus</i> and <i>Streptococcus</i>	10
Bacilli	-	<i>Veillonella</i>	2
	+	<i>Propionibacterium</i> and <i>Arachnia</i>	15
		<i>Lactobacillus</i>	3
		<i>Actinomyces</i>	2
		<i>Clostridium</i>	2
	-	<i>Bacteroides</i> and <i>Leptotrichia</i>	6

*Total identified were 46 of 49 isolates.

DISCUSSION

The bar-graphs of **Figs. 1 and 2** suggest that *B. melaninogenicus* (including *B. asaccharolyticus*) and bacterial gelatinase-producers were found in greater numbers (relative to the total cultivable flora) in affected sites of periodontitis patients than at the same sites in healthy control patients. However, this suggestion was not supported by statistical analyses of the data so that the apparent differences in microbial recoveries from diseased patients and healthy subjects could have been due to chance.

It is important to emphasize that studies on specific cultivable microbial flora, especially when expressed as a percentage of the total cultivable microflora, must show large percentage differences between sample types to be meaningful. There are innumerable sources of inherent errors introduced throughout the procedures: inability to grow all the micro-organisms, inadequacy of nutrients

supplied, death of cells during manipulation, sample size and sampling inconsistencies, insufficient dispersion of cells or cell clumping, and so on.

The subspecies distribution of black-pigmented *B. melaninogenicus* isolated and serially cultivated in pure culture was determined. As shown in **Table 1**, 38 per cent were *B. asaccharolyticus*, 52 per cent were subspecies *melaninogenicus*, and 10 percent were subspecies *intermedius*. This finding is in general agreement with that of Spiegel, et al.¹⁰ who found both *B. melaninogenicus* subspecies *melaninogenicus* and *B. saccharolyticus* at periodontitis sites exhibiting bone loss.

The genera distribution of gelatinase-producers, of the 49 strains isolated and serially propagated, is shown in **Table 2**. Many genera are represented. Most of the isolates were of the genera *Staphylococcus*, *Streptococcus*, *Propionibacterium*, and *Arachnia*. Of interest here is the fact that they are all gram-positive organisms, the group found by Williams *et al.*⁵ to be predominant in moderate to severe periodontitis but not by others, for example Slots⁴.

Acknowledgements

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Chondroitin Sulfatase — Producing and Hyaluronidase — Producing Oral Bacteria Associated with Periodontal Disease.

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ABSTRACT

The prevalence of anaerobic chondroitin sulfatase and hyaluronidase — producing bacteria in plaque samples from 22 patients was investigated. In patients with healthy periodontium, chondroitin sulfatase — producing bacteria constituted 10.3 percent (S.D. = 8.7) of the total anaerobic cultivable subgingival bacteria. In patients with diseased periodontium 20.2 percent (S.D. = 21.8) of the cultivated bacteria produced the enzyme. Hyaluronidase — producing anaerobic bacteria represented only 3.0 percent (S.D. = 2.9) of the total anaerobic bacteria from healthy gingival sulcus. In the diseased state, these organisms increased to 7.4 percent (S.D. = 6.9). According to the Wilcoxon Rank Sum Test, the occurrence of these two groups of bacteria was more prevalent in the diseased state than in the healthy state ($P < 0.05$ for chondroitin sulfatase-producers and $P < 0.10$ for hyaluronidase — producers). There was a positive correlation between the percentage of these two groups of organisms and the extent of periodontal destruction as measured by the loss of attachment in mm ($r = 0.52$ for both groups of organisms). The predominant genera that elaborated exoenzymes against the mucopolysaccharides of connective tissue were *Propionibacterium*, *Peptococcus*, *Fusobacterium*, *Bacteroides* and *Veillonella*.

INTRODUCTION

The relative importance of direct microbial damage as opposed to host immune reaction to microbial factors has not yet been determined in periodontal disease. There is general agreement that micro-organisms play some role in the initiation of this disease^{1,2,3}. Most investigations have been directed towards the isolation and identification of microbial species in different periodontal conditions^{4,5,6}. However, no specific organisms have been shown definitively to be causative agents of the disease^{7,8}.

In the present investigation, a different approach was used to study the microbiological involvement in periodontal disease. Instead of enumerating, isolating and identifying the predominant species of micro-organisms in diseased periodontal pockets, the incidence and nature of micro-organisms that carry out a particular pathogenic process that may be related to the disease were examined. One process thought to be related to the pathology of periodontium is the elaboration of chondroitin sulfatase and hyaluronidase by micro-organisms.

Hyaluronidase, when injected into monkey interdental papillae, produced histological gingivitis⁹. The administration of hyaluronidase into gingival crevice of humans caused a loss of intercellular substance from the crevicular epithelium with dilation of vessels, vacuolization, and

disorganization of subjacent connective tissue¹⁰. Hyaluronidase and chondroitin sulfatase elaborated by bacteria were found in most human salivas, and the concentration of hyaluronidase was shown to be greater in subjects with periodontal disease¹¹. There have been preliminary reports on the production of these enzymes by oral bacteria^{12,13,14,15}. However, the prevalence of micro-organisms producing these enzymes in dental plaque from diseased and healthy gingival crevices have not been studied in detail. Nor has any attempt been made to characterize the organisms involved.

MATERIALS AND METHODS

Selection of Patients

Patients were selected at random from the dental clinic at the Montreal General Hospital. Only patients in good medical health, not on any medication (such as antibiotics) and who had not received treatment within the past six months were included in the study. Twenty-two patients of either sex and of different ages were selected.

Classification of patients

Patients were classified as periodontally healthy or diseased according to clinical and radiographic examination. Patients with no (or minimum) gingivitis and no loss of periodontal attachment were classified as periodontally healthy. Patients with obvious periodontal destruction were classified as periodontally diseased. Doubtful cases were rejected since it is obviously difficult to determine between active and inactive sites in this group.

Collection of samples

Usually two sites were sampled for each patient for culturing. Site 1 was the mesial buccal of the upper left first bicuspid and site 2 was the distal lingual of the lower right molar. At each sampling site, supragingival plaque was first removed with a curette and discarded to minimize contamination. The area was rinsed with water, dried with an air syringe and isolated with sterile cotton rolls. The subgingival plaque was collected with a fine curette which was inserted as deeply into the pocket as possible. The sample was immediately inoculated into a fluid anaerobic transport medium while being kept reduced with a stream of argon gas. The anaerobic transport fluid (originally developed by Williams, *et al.*⁴) was prepared prereduced⁷ anaerobically sterilized and was dispensed into airtight bottles according to the method of Chan, *et al.*¹⁶ After collection of the sample, Loe's Gingival Index¹⁷ and the loss of periodontal attachment in mm (pocket depth or pocket depth plus gingival recession for the cemento-enamel junction if there was gingival recession) were recorded for each sampling site.

Treatment of specimens

The plaque sample was then dispersed in an ultrasonic cleaner (Branson model HD-150, Heat Systems Co.,

Melville, N.Y.) for 20 seconds and then thoroughly mixed in a vortex mixer. This method of dispersal was gentler than with a regular ultrasonic disintegrator. Preliminary controlled experiments using fragile mycoplasma cells had shown a 10 times increase in colony forming units using this procedure. Inside an anaerobic chamber (with 90 per cent N₂, 5 per cent H₂ and 5 per cent CO₂), the sample was then diluted serially in transport fluid and plated on media that could be used to screen for chondroitin sulfatase or hyaluronidase-producing bacteria. Incubation was five to seven days at 37°C. Strict anaerobiosis was maintained throughout.

Preparation of media

The media used for the screening of chondroitin sulfatase and hyaluronidase-producing micro-organisms were devised by Smith and Willett¹⁸. The technique depended on the ability of bovine serum albumin to co-precipitate with the undegraded mucopolysaccharides when the medium was flooded with 2N acetic acid to produce a cloudy appearance. Colonies elaborating exoenzymes against these substrates exhibited clear zones around them when the plates were flooded with acid. In order to cultivate anaerobic oral bacteria, the media were supplemented according to directions in the Anaerobe Laboratory Manual¹⁹ with vitamin K (0.5 ug/ml), hemin (5 ug/ml), cysteine-HCl (0.5 mg/ml) and resazurin (0.4 mg/ml, as an indicator for anaerobiosis). All stable ingredients were boiled to rid them of oxygen and autoclaved with a check valve under an atmosphere of nitrogen gas as described by Chan, *et al.*¹⁶ Heat-unstable ingredients were filter-sterilized and then added under a stream of sterile argon gas after the medium was cooled to 46°C. All plates were poured inside an anaerobic chamber and left in it overnight before use.

Isolation and characterization of bacteria that produced the enzymes

For the isolation of the enzyme-producing bacteria, millipore membrane of 8 µm pore size was put on the surface of the solid agar medium and a thin layer (approximately 1 mm) of agar medium was then poured on top and allowed to solidify. After incubation, the top layer could be separated and retained inside the anaerobic chamber while the bottom layer of medium was reacted with acetic acid for the detection of clear zones outside the chamber. Such zones could be correlated easily with colonies on the membrane filter agar layer. Such colonies could then be tested for purity and subcultured for characterization. Convention techniques for identifying anaerobic bacteria as described in the Anaerobe Laboratory Manual¹⁹ were used to characterize each strain to the genus level. Procedures used included colony morphology, light microscopy and analysis of end products of fermentation using gas-liquid chromatography.

RESULTS

Tables 1 and 2 summarize the average Loe's Gingival Index, the average loss of periodontal attachment, and the average percentage of anaerobic cultivable bacteria pro-

ducing chondroitin sulfatase for each of the 10 periodontally healthy and each of the 12 periodontally diseased patients, respectively. **Tables 3 and 4** summarize the results obtained for hyaluronidase-producing bacteria for nine periodontally healthy and nine periodontally diseased patients, respectively.

Table 1
Occurrence of Chondroitin Sulfatase-Producing Anaerobic Bacteria in Periodontally Healthy Patients

Patient No.	Age	Sex	Average Loe's G.I.	Average Loss of Periodontal Attachment MM	Site 1		Site 2		Average Per Cent Active Colonies
					Total Colonies	Active Colonies	Total Colonies	Active Colonies	
1	26	M	0	2.5	144	9	144	8	5.9
2	24	F	0.5	3.0	68	1			1.5
3	24	M	0.5	3.5			80	3	3.8
4	26	F	0	2.75	650	9	10	0	1.4
5	22	F	0	2.5	3	0	45	6	12.5
6	21	F	0.5	2.75	58	3	26	0	3.6
7	26	M	0.75	2.50	14	6	30	5	25.0
8	36	M	0	3.0	59	3	122	17	11.0
9	25	M	0	2.5	13	1	36	0	2.0
10	23	F	0	2.75	24	2	19	1	7.0

Table 2
Occurrence of Chondroitin Sulfatase-Producing Anaerobic Bacteria in Periodontally Diseased Patients

Patient No.	Age	Sex	Average Loe's G.I.	Average Loss of Periodontal Attachment MM	Site 1		Site 2		Average Per Cent Active Colonies
					Total Colonies	Active Colonies	Total Colonies	Active Colonies	
11	61	F	1.0	5.0	107	9			8.4
12	40	M	1.5	8.5			22	0	0
13	65	M	1.0	4.7	20	4	58	9	16.7
14	40	F	0	4.5	58	11			19.0
15	45	M	0	5.0	139	14	29	6	11.9
16	38	F	1.0	9.0	55	19	29	26	53.6
17	52	F	1.0	8.5	63	7	99	36	26.5
18	48	F	0	7.0			40	3	7.5
19	25	M	0.3	6.0	28	6	37	5	16.9
20	48	F	0.25	3.0	15	2	12	2	14.8
21	16	M	0.7	3.3	76	7	169	12	7.8
22	36	M	1.5	3.5	66	7	13	0	8.9

Table 3

**Occurrence of Chondroitin Sulfatase-Producing Anaerobic
Bacteria in Periodontally Healthy Patients**

Patient No.	Age	Sex	Average Loe's G.I.	Average Loss of Periodontal Attachment MM	Site 1		Site 2		Average Per Cent Active Colonies
					Total Colonies	Active Colonies	Total Colonies	Active Colonies	
1	26	M	0	2.5	220	11	160	7	4.7
2	24	F	0.5	3.0	57	1			1.8
3	24	M	0.5	3.5			78	0	0
5	22	F	0	2.5	13	0	59	6	8.3
6	21	F	0.5	2.75	4	0	78	0	0.6
7	26	M	0.75	2.50	88	9	43	0	6.9
8	36	M	0	3.0	133	7	98	0	2.2
9	25	M	0	2.5	6	0	21	0	0
10	23	F	0	2.75	33	2	60	0	2.2

Table 4

**Occurrence of Chondroitin Sulfatase-Producing Anaerobic
Bacteria in Periodontally Diseased Patients**

Patient No.	Age	Sex	Average Loe's G.I.	Average Loss of Periodontal Attachment MM	Site 1		Site 2		Average Per Cent Active Colonies
					Total Colonies	Active Colonies	Total Colonies	Active Colonies	
12	40	M	1.5	8.5	26	0			0
13	65	M	0	4.7	40	0	30	0	0
14	40	F	0	4.5	52	1			1.9
15	45	M	1.75	5.0	139	4	55	4	4.1
16	38	F	1.0	7.5	55	13	16	3	22.5
17	52	F	1	8.5	85	26	200	35	21.4
18	48	F	0	7.0			98	18	10.0
19	25	M	0.25	6.0	22	0	49	13	18.3
20	48	F	0	3.5	15	1	12	3	14.8

Fig. 1 shows the prevalence of chondroitin sulfatase-producers in periodontally healthy and diseased patients. Chondroitin sulfatase-producers represented about 10.3 per cent (S.D. = 8.7) of the total anaerobic cultivable subgingival micro-organisms in patients with healthy periodontium, while in patients with diseased periodontium this percentage increased to 20.2 per cent (S.D. = 21.8). **Fig. 2** shows the occurrence of hyaluronidase-producing bacteria in periodontally healthy and diseased patients. About 3.0 per cent (S.D. = 2.9) of the total anaerobic cultivable flora in subgingival plaque from

patients with healthy periodontium produced hyaluronidase, while in the diseased state, this percentage increased to 7.4 per cent (S.D. = 6.9). Using the Wilcoxon Rank Sum Test (nonparametric analysis), it was concluded that chondroitin sulfatase-producers and hyaluronidase-producing bacteria were more prevalent in dental plaques of periodontally diseased patients than in those of periodontally healthy patients ($p < 0.05$ for chondroitin-sulfatase producers and $p < 0.10$ for hyaluronidase producers). When the percentage of organisms that produced chondroitin sulfatase was plotted against the

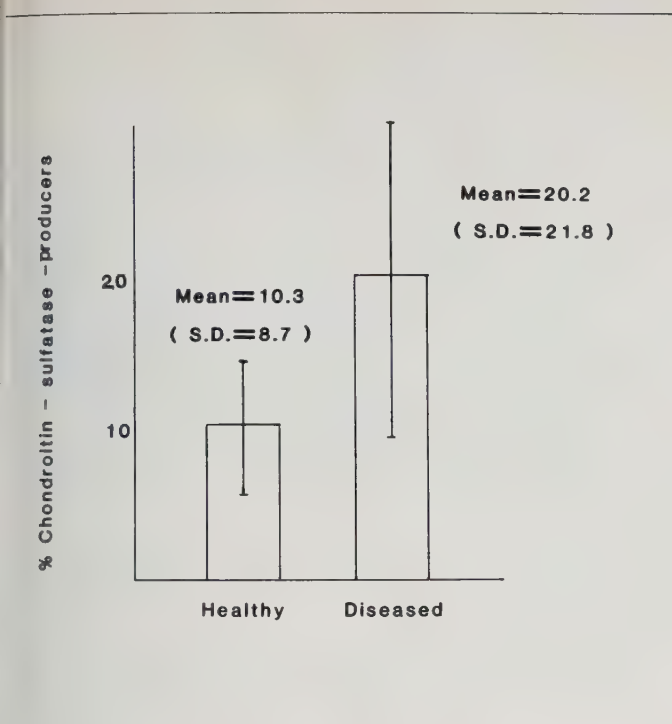


Figure 1.

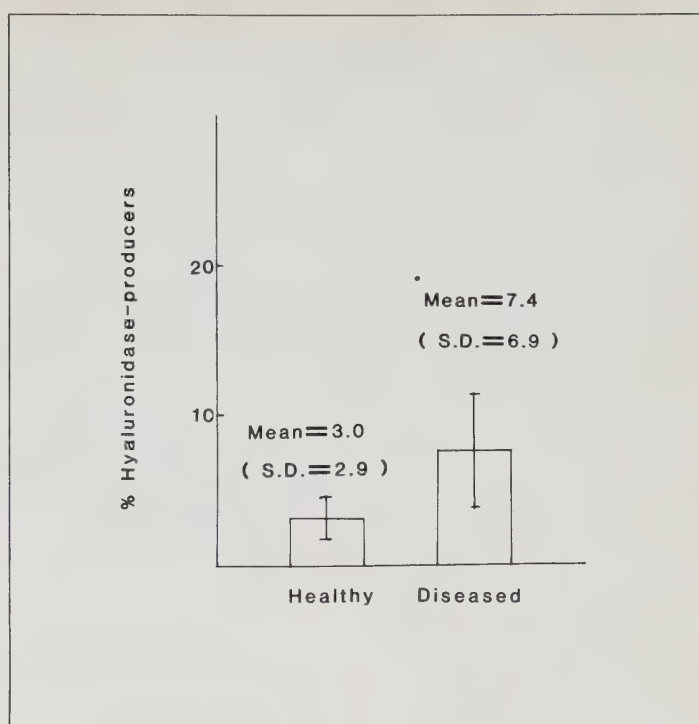


Figure 2.

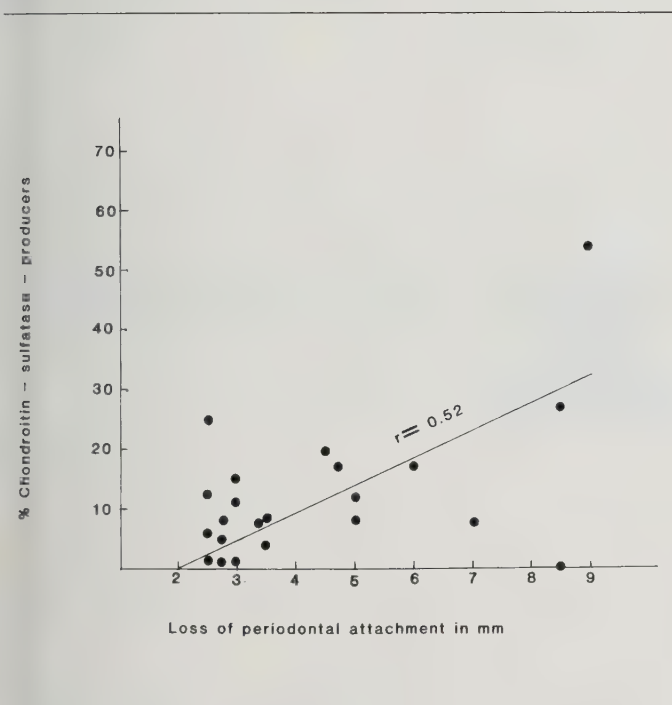


Figure 3.

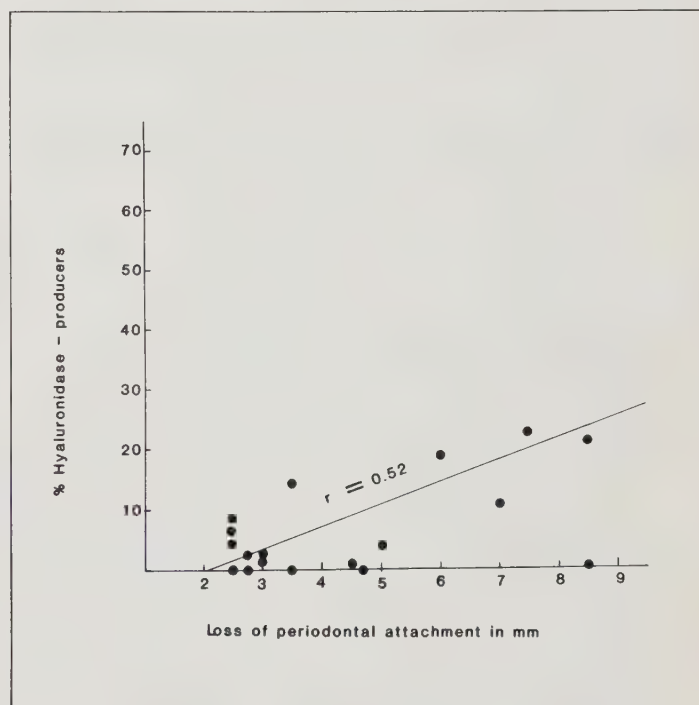


Figure 4.

extent of periodontal destruction as measured by the loss of periodontal attachment (pocket depth or pocket depth plus gingival recession from the cemento-enamel junction if there was gingival recession), a positive correlation was observed (Fig. 3). Similarly, there was a positive correlation between the per cent of hyaluronidase producers in subgingival dental plaque and the extent of periodontal destruction (Fig. 4). ($r = 0.52$ for both chondroitin sulfatase-producers and hyaluronidase-producers).

The most frequently isolated genera of anaerobic oral bacteria that elaborated exoenzymes against the ground

substance (chondroitin sulfate and hyaluronic acid) of connective tissue were *Propionibacterium*, *Peptococcus*, *Fusobacterium*, *Bacteroides* and *Veillonella*.

DISCUSSION

The study of certain enzyme-producing groups of bacteria, rather than taxonomic groups, as related to periodontal health was made. This study was initiated on the premise that chondroitin sulfatase and hyaluronidase production by micro-organisms can be regarded as one

contributing factor to periodontal disease. These enzymes may contribute to periodontal pathology directly by destroying the cementing substance of periodontium or they may act indirectly by enhancing the spread of bacterial toxins.

We found that bacteria which produced these enzymes occurred commonly in gingival sulcus and these bacteria occurred in significantly higher numbers in diseased periodontium as compared with healthy periodontium. There was a positive correlation between the prevalence of these two groups of bacteria with the degree of periodontal disease so that the assay of these two groups of bacteria in subgingival plaque could be used as a means to assess periodontal health. It was significant that *Fusobacterium*, *Bacteroides* and *Veillonella* were among the genera isolated to produce either chondroitin sulfatase, hyaluronidase, or both, because genera of these bacteria have been found to be associated with different types of periodontal pathology^{3,20}. Our study suggested a pathogenic process for these genera of bacteria in the development of periodontal disease.

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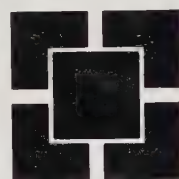
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Spiramycin and the specific plaque hypothesis:

A new concept in plaque control

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Periodontal disease is a ubiquitous disease and the principal cause of tooth loss in all human populations studied. It constitutes a major health and socio-economic problem in the world today, affecting both adults and children. Its prevalence and severity increase with age.

Although the economic cost for treatment of periodontal disease and its resultant destruction probably runs into the hundreds of millions of dollars each year, it does not begin to take into account the emotional and physical stress connected with dental care, or the cost of absenteeism from work, all of which are socio-economic outcomes of periodontal disease.¹

The association of periodontal disease and plaque is well documented²⁻⁴ and leaves little doubt that the etiological agents are bacterial in origin. The evidence is based on studies which show that: (1) germ-free animals do not develop periodontitis; (2) gingivitis can be transmitted between animals or from humans to animals by the transfer of certain plaque micro-organisms; (3) in humans there is a direct correlation between the development of gingival inflammation and plaque accumulation; (4) mechanical removal or chemotherapeutic control of plaque in man and animals with gingivitis, shows a decrease in gingival inflammation.

Concepts of Plaque Control

Loesche,⁵ in his review of the chemotherapy of dental plaque infections, in referring to the treatment of dental caries and periodontal disease, stated:

"Therapy has focussed on mechanical debridement of plaque from the dentogingival surfaces in order to

maintain a low level of bacteria in contact with either the tooth or gingival surfaces. This antimicrobial approach, while conceptually valid and successful when rigorously practised, is so highly labour-intensive that, if it is to be performed solely by the dental profession, it would be economically unavailable to most members of the population, or if it is to be performed by the individual, it would require a degree of motivation that is difficult to obtain in most humans."

These points are borne out by research workers as well as by dental health personnel and patients.

Axelsson and Lindhe⁶ found that while it was possible, by regularly repeated tooth cleaning instruction and prophylaxis given every 2-3 months, to stimulate adults to adopt proper oral hygiene habits, patients seen once a year suffered further periodontal breakdown as well as new and recurrent carious lesions. Ramfjord *et al*⁷ showed that in advanced periodontal disease, meticulous scaling, with or without surgical elimination of periodontal pockets, followed by systematically repeated prophylaxis at 3-monthly intervals can arrest or substantially retard further progressive destruction of periodontium. Axelsson and Lindhe⁸ demonstrated that school children subjected to a very intense oral hygiene program, including professional tooth cleaning once every two weeks for two years, did not develop caries or any obvious signs of gingivitis. Nymans *et al*⁹ demonstrated that post-surgical periodontal patients, who received a professional cleaning every two weeks, were able to maintain a high standard of oral hygiene with resultant success in periodontal treatment.

This contrasted with patients seen every six months who were unable to maintain a high standard of oral hygiene, with the result that treatment of periodontal disease failed. Sheiham¹⁰ found that although subjects who brushed more frequently had cleaner teeth and less severe periodontal disease, even the most frequent brushers failed to effectively remove the residual plaque and calculus, which lead to advanced destructive chronic periodontal disease in middle-aged persons. Waerhaug¹¹ has raised questions about whether or not it is possible to eliminate all subgingival plaque even with meticulous scaling. In a study involving 39 experimental teeth, all of which had been meticulously scaled, eight still had remnants of subgingival plaque. These remnants gave rise to rapid reformation of subgingival plaque and resulted in an inflammatory reaction, which was not clinically evident if a high standard of supragingival plaque control was maintained. On the other hand, Waerhaug¹² found that if subgingival and supragingival plaque was removed, then epithelial reattachment would occur. Also, further formation of subgingival plaque could be prevented by adequate supragingival plaque control.

It would seem, therefore, that adequate plaque control, both on the part of the patient and the dental profession, can lead to an improvement in the periodontal status, an arrest of further periodontal breakdown and reattachment of the dentoepithelial junction. As was pointed out, however, the achievement of adequate plaque control is very difficult and time-consuming for both patient and dentist alike. The return of inflammation and periodontal breakdown can probably be attributed to a repopulation of the subgingival area with plaque bacteria. Repopulation is most likely due to two factors: the incomplete removal of bacteria in the subgingival area, and inadequate plaque control by the patient.

Over the years, various workers have looked on the use of antimicrobial agents in controlling plaque micro-organisms.⁵ Their use, however, was based on the Non-Specific Plaque Hypothesis which holds that periodontal diseases are non-specific microbial infections and that all plaques in all mouths have an equal potential to cause dental infection. Based on this hypothesis, plaque formation, which occurs continuously on tooth surfaces, would have to be prevented. Also, as all people form plaque, everyone would have to be treated. Antimicrobial agents would have to be chosen which were broad spectrum in activity, would not select resistant forms and had no additional side effects. Such an agent would have to be given continuously for the remainder of a person's lifetime, without any date of termination. This sort of open-ended treatment schedule is without precedent in antimicrobial therapy and runs the risk of development of resistant organisms and overgrowth of non-susceptible organisms. One also faces the problem of harmful side effects from the drugs, many of which have never been (and were not

meant to be) used on such a long-term basis. Given these criteria for success, as well as the problems associated with long-term use of these agents, the idea of antimicrobial control of plaque has never gained acceptance with the dental profession.

In recent years, the premise of the Non-Specific Plaque Hypothesis has been questioned. Various workers have shown that plaque flora varied from site to site within the same mouth¹³⁻¹⁵ as well as from individual to individual.¹⁶⁻¹⁷ New evidence^{3,4} suggests that clinically healthy gingiva may exist in the presence of microbial flora and that this flora is different from that present in periodontal disease. It also suggests that different types of microbial flora are associated with different clinical patterns of periodontal disease. The elimination by mechanical and/or chemotherapeutic means, of those micro-organisms implicated in the etiology of periodontal disease results in the resolution of inflammation and an improvement in the periodontal status of patients. These studies have radically changed the profession's view of the role of plaque in the etiology of periodontal disease and will, in the future, influence the approach to periodontal treatment. These concepts are now referred to as the Specific Plaque Hypothesis and are well addressed in Loesche's review.⁵ Under the Non-Specific Plaque Hypothesis, the prophylactic use of antimicrobial agents was never widely accepted. With the Specific Plaque Hypothesis, however, only those patients with disease need be treated and the antimicrobial agent would be used for short periods of time, the object being not to prevent plaque formation but to eliminate those micro-organisms implicated in the etiology of periodontal disease.

In selecting an antimicrobial agent, certain criteria should be fulfilled: (1) it should be effective against the micro-organisms involved; (2) to be effective, it should have the ability of getting to the site of the subgingival flora, e.g., by secretion in the gingival crevicular fluid in sufficiently high concentrations; (3) it should not produce resistant strains, given the therapeutic regimen used; (4) it should preferably not be a drug that is important in life threatening situations (in order to minimize the possibility that the development of resistant strains may make it ineffective in the future when required); (5) there should be no harmful side effects (allergic reactions, blood dyscrasias, etc.) In the U.S.A., the antibiotic approved by the F.D.A. which comes closest to fulfilling these requirements is tetracycline,¹⁷ and thus most of the studies using antimicrobial agents to eliminate implicated micro-organisms have involved the use of this drug.

However, studies comparing the effect of scaling and root planing (with or without tetracycline therapy) on the make-up of subgingival plaque have yielded inconclusive results as to the advantage of adjunctive tetracycline therapy. Slots *et al*¹⁸ found systemic tetracycline therapy

to be of use in refractory cases which would not respond to treatment by scaling and root planing alone. He also found a more consistent and earlier reduction in the Gram-negative anaerobic organisms with the use of tetracycline compared with conventional therapy alone. However, there did not appear to be any major prolongation of the repopulation time among the groups of organisms studied in the tetracycline-treated patients.

Genco *et al*¹⁹ found a greater reduction in the plaque index with adjunctive tetracycline in the first six months but this gradually returned to levels comparable with that of the control group. There was a significant reduction in both groups during the first three months. However, the GI of the tetracycline group rose to pretreatment levels at six months, to higher levels at 15 and 24 months, while that of the control group steadily decreased. There was a greater reduction in suppuration in the tetracycline group.

Lindhe *et al*²⁰ could find no difference between the subgingival flora after scaling and root planing were carried out with and without the local use of tetracyclines. Haffajee *et al*²¹ found that in pockets less than 4 mm in depth, the adjunctive local use of tetracycline was more effective than scaling and root planing alone, in eliminating spirochetes and motile rods for two weeks. It was not as effective in deeper pockets.

Listgarten *et al*²² and Helldén *et al*²³ found little difference between scaling and root planing, with and without systemic tetracycline therapy. They also found that patients on tetracycline therapy alone tended to return toward baseline values for microbial flora more rapidly after eight weeks, although the clinical parameters remained the same at 25 weeks. Reynolds *et al*²⁴ found that changes which occur with the use of systemic tetracycline are different and longer-lasting than those occurring with mechanical therapy and might be related to the better clinical results which they observed in this group. Scopp *et al*²⁵ in a three-month longitudinal study could find no clinical benefits in adjunctive tetracycline use.

Although tetracyclines are not usually the primary antibiotic of choice in any medical situation involving life and death, they are nevertheless indicated in a variety of medical conditions. It is therefore important not to use this drug in any way that would encourage the development of resistant strains or increase the susceptibility to oral candidosis. Both McKendrick *et al*²⁶ and Slots *et al*¹⁸ indicate that systemic tetracycline therapy does not increase the patient's susceptibility to develop candidal infections or increase the prevalence of *Candida* organisms in the oral cavity. Studies^{18,27} on the ability of tetracyclines to encourage the development of resistant strains amongst the microbial flora of plaque have revealed several things, i.e., that a naturally occurring population of resistant organisms exists, even in patients who have not recently been on tetracycline therapy; that although

there was some increase in resistant strains during use of tetracyclines, their development depends, to a certain extent, on the therapeutic regimen used.

The use of tetracycline is contraindicated during tooth development because of the danger of permanent tooth discoloration and enamel hypoplasia. It should therefore not be used during the last half of pregnancy, infancy and childhood to the age of eight years. Results of animal studies indicate that tetracyclines cross the placenta, are found in fetal tissues and can have toxic effects on the developing fetus (often related to retardation of skeletal development). This drug should therefore not be used in pregnant or lactating women unless potential benefit to the patient outweighs risk to fetus or child. Their use is also contraindicated in cases of hypersensitivity to tetracycline, in severe renal or hepatic disease.²⁸

It would appear from the foregoing that the advantages of the adjunctive use of tetracycline in the control of plaque have neither been unequivocally shown nor is the use of the drug without its problems and limitations. Clearly, an alternative antimicrobial agent is needed which more closely fulfills the criteria laid down previously.

Spiramycin

An antibiotic which comes close to fulfilling the criteria laid down previously is spiramycin. It has been used widely in Europe and, to a limited extent, in Canada for the treatment of a variety of dental infections, including periodontal disease. It is not widely prescribed by the medical profession because there are other preferred drugs for most medical conditions. This is advantageous for its use in dentistry since there is less risk of large numbers of patients being sensitive to the antibiotic or of resistant organisms developing. Also, an indispensable medical agent is not being used for a non-life-threatening condition.

Spiramycin is a macrolide antibiotic belonging to the same group as erythromycin. Macrolides have the same mechanisms of action and general antibacterial spectrum. According to the Compendium of Pharmaceuticals and Specialties,²⁸ it is active against Gram-positive bacteria, particularly *Staphylococcus aureus*, beta-hemolytic streptococci, *Streptococcus viridans*, *S. faecalis* and *pneumoniae*. Gram-negative organisms, in general, are less sensitive, although *Haemophilus pertussis* and *Neisseria* are usually sensitive. Most of the erythromycin-resistant strains of *S. aureus* are sensitive to spiramycin but cross-resistance between spiramycin, oleandomycin and erythromycin may occur.

In using spiramycin, it is recommended that the usual precautions for antibiotic therapy be observed. Although adverse reactions include nausea, vomiting, diarrhea, epigastric pain and skin sensitization, most clinical studies stress that the drug is well tolerated. Darbon and

Crosnier²⁹ used spiramycin in 100 patients and found tolerance to be excellent in all respects and better than that of other orally administered antibiotics. There was only one case of "imperfect gastric tolerance", which showed itself in nausea and some vomiting. Martin *et al*³⁰ compared the use of spiramycin and erythromycin in 25 patients with scarlet fever and found them equally effective, with spiramycin being slightly better tolerated. Ravina and Pestel³¹ reported excellent tolerance amongst 14 patients treated. This was well demonstrated by one patient who was given a total of 125 grams of spiramycin. There were no gastro-intestinal disturbances, liver or kidney problems. Lacroix and Galley³² treated 11 patients with three grams daily for periods of up to 39 days without any reported gastro-intestinal disturbances. They found spiramycin to be better tolerated than chlortetracycline. Willcox³³ reported "no serious toxic reactions were noted" in 41 patients. Some mild side effects were reported by eight patients; such effects followed the general pattern usually encountered with other orally administered antibiotics. Flamant and Javelier³⁴ reported nausea in only two out of 30 patients after administration of spiramycin. The other patients tolerated it very well. In Hudson *et al*³⁵ the chief complaint was the bitter taste of the drug. Two out of the 29 patients also exhibited diarrhea after using the antibiotic.

Spiramycin has also been used in infants and children and was reported to be well tolerated. Chaptal *et al*³⁶ used spiramycin in 62 children and infants without any gastro-intestinal disturbances, yeast overgrowth or reaction of intolerance. Rayel³⁷ found it to be well tolerated in 200 children, even when strong doses were used. Johnson *et al*³⁸ reported unfavorable side effects in only two out of 63 patients after one week of therapy. One patient reported a vesicular reaction on her hands but continued to take spiramycin for the full five days. When she returned on Day 7, the vesicles had almost disappeared and no treatment was instituted. Another patient discontinued the capsules after taking 15 of the required 20, because of diarrhea and a burning sensation of the rectum. It should be noted that of five people who complained of loose stools, three were on placebos. There are numerous other clinical reports³⁹⁻⁴³ which indicate that spiramycin is well tolerated. In these reports, only minor gastro-intestinal disturbances were noted in a few patients.

The use of spiramycin in dentistry was first reported by Daligand and Pellerat⁴⁴ in 1956. They treated seven patients with refractory cases of periodontal disease. These cases were followed up for three weeks to seven months, and the authors reported satisfactory clinical results which lasted the period of the study.

Daligand⁴¹ reported a three-year study in which 90 patients with periodontal disease were treated with a combination of mechanical debridement and spiramycin for 20 days. He reported "excellent" results in 67 patients, "satisfactory" improvements in 16, and "failures" in seven

patients. He felt that the 16 cases who merely improved represented difficult cases who did not strictly follow the prescribed treatment or who could be suspected of having impaired liver function. The seven failures were related to patients who had discontinued spiramycin therapy because of intolerance. Since these reports, numerous others have appeared in the literature (mainly in European journals) extolling the virtues of this drug in treating not only periodontitis but also a variety of other dental infections. Thus, Hess⁴⁵ found spiramycin to be of use in the treatment of periodontitis. Couturier,⁴⁶ over a two-to-three year period, studied 800 patients treated with spiramycin. He concluded that this drug, even in low doses, seemed to assist in destroying the organisms in periodontal disease. Gendron⁴² treated 300 patients with a variety of dental infections, prior to any other form of treatment, and noted marked improvement in most cases. He recommended it for refractory cases which do not respond to local therapy.

Harvey⁴³ reported the successful use of spiramycin over a period of two-and-a-half years in 70 cases of acute and subacute oral and periodontal infections. He concluded it was of value when used along with local therapy in the more severe suppurative cases. Winer *et al*⁴⁷ compared the use of spiramycin and a placebo, with and without treatment, in 60 mentally subnormal patients with moderate to severe periodontal disease. There was a more significant improvement when spiramycin was used, even in cases in which local therapy was not given. Mills *et al*⁴⁸ in a four-week clinical trial, compared the use of systemic spiramycin, erythromycin and a placebo in treating periodontal disease. They found that spiramycin was the most effective in the reduction of the clinical indices, i.e., gingival index, pocket depth, plaque height, crevicular fluid flow and weight, and plaque weight. They also found it was more useful in advanced periodontal lesions in which deep pocketing occurred than in gingivitis.

Johnson *et al*³⁸ carried out an 11-week clinical trial on 63 patients in order to test the ability of spiramycin in preventing the buildup of supragingival plaque and the subsequent development of gingivitis. Both experimental and control groups were scaled and allowed to practise oral hygiene for seven days, after which they were told to stop cleaning for 11 weeks. Plaque and gingival indices were recorded at Weeks 0, 1, 3, 7 and 11. The only statistically significant difference between the two groups was observed in mandibular plaque at Week 3. It should be pointed out that no information was given in this study on the periodontal status of the patients and that these findings are not inconsistent with other reports, since Mills *et al*⁴⁸ indicated that spiramycin may be more useful in advanced periodontal disease rather than in gingivitis. In a complementary paper, Rozanis *et al*⁴⁹ reported there was a statistically significant decrease in supragingival plaque in the experimental group which lasted for at least three weeks. *Streptococcus mutans* and *S. sanguis* decreased

significantly between Weeks 1 and 3, but there was no detectable influence on the number of Gram-negative organisms in this plaque. Turnball and Pearson,⁵⁰ in a review on the role of spiramycin in periodontal therapy, concluded it was useful as an adjunct to local periodontal therapy.

Spiramycin is also reported to have a synergistic effect when combined with metronidazole in the treatment of a variety of infections. Videau *et al*⁵¹ isolated from the buccodental flora 160 strains of aerobic bacteria and 44 strains of anaerobic bacteria and determined their sensitivity to 18 different groups of antibiotics. It was shown that true synergism occurs between spiramycin and metronidazole.

Laufer *et al*⁵² used this combination in patients with infections caused by aerobic bacteria, protozoa, spirochetes and anaerobic bacteria and found that effective *in situ* concentrations were attained. Pujo and Rojo⁵³ treated 100 patients with the spiramycin and metronidazole combination and found it to be effective against dental infections.

Further support for the role of spiramycin in periodontal therapy comes from the work of Keyes *et al*,⁵⁴ who in 1966 tested nine antibacterial agents for their ability to control dentobacterial plaque, dental caries and periodontal lesions in syrian hamsters. Of the nine agents assayed, only spiramycin and vancomycin were effective in controlling all of these. Keyes and McCabe,⁵⁵ using an *in vitro* technique have compared the ability of 18 bactericidal agents to suppress *Streptococcus mutans* or *Actinomyces viscosus* and concluded that spiramycin was more acceptable than most, in the control of these bacteria.

Spiramycin is reported to be retained in high concentration in the alveolar bone, gingival tissue and salivary glands for long periods of time and is gradually secreted from these sites. This may explain its apparent effectiveness in treating periodontitis despite its spectrum of activity.

Bousquet,⁵⁶ in a summary of a thesis by Woehrlé (1968), reported that spiramycin is far more active *in vivo* than *in vitro*. Although, paradoxically, higher bacteriostatic levels are achieved *in vitro* than are generally found in the blood following the usual therapeutic doses, nevertheless, *in vivo* concentrations proved effective since spiramycin accumulated in most of the tissues and was found at the sites of infection in far greater concentrations than in the blood.

Pellerat,⁵⁷ in a pharmacological study of the salivary excretion of penicillin, the tetracyclines, erythromycin and spiramycin, found that the latter was the only one that, at low dosages, produced high prolonged levels in saliva. This property was shared to a lesser extent by erythromycin. Whereas the saliva levels of penicillin and the tetracyclines were much lower than their blood levels, that of erythromycin, and especially of spiramycin, were

very much higher than their blood levels.

Zvetanova and Klein-Guenova⁵⁸ measured the serum levels and storage and retention time in the jaw and long bones of the white rat following oral administration of different doses of the antibiotic, and concluded that spiramycin accumulated in the bones (jaws and long bones) where high concentrations were stored with no loss of antibacterial activity, for fairly long periods of time (22 to 26 days). During the first few days, bone concentrations of the antibiotic were directly related to the dose administered, whereas retention time of the drug in the bones was not. They also found that blood serum levels were considerably (8-100 times less) lower than bone levels. Yankell *et al*⁵⁹ in experiments on rats, found that plasma levels of spiramycin peaked three hours after a single 100 mg/kg dose. Similar high plasma levels occurred at two, four and six hours but at 24 hours were not detected. In saliva, the drug was first detected after one hour and gradually increased in concentration up to six hours. After 24 hours, low, but detectable saliva levels were observed. With a single 25 mg/kg dose, spiramycin could not be detected in plasma after one hour, whereas it could be detected in saliva for eight hours after administration. Leung *et al*⁶⁰ repeated the experiments but instead administered consecutive daily doses of spiramycin. The rats were given spiramycin at doses of 25 to 400 mg/kg for seven to 14 consecutive days; plasma, parotid and submaxillary glands, mandibular bone, and gingiva were assayed to determine residual antibiotic levels at one, seven, 14 and 21 days after the final doses. With concentrations of 25, 50, 100 and 150 mg/kg for 14 days, no antibiotic was detected in plasma 24 hours after the final doses. With 400 mg/kg, after seven days, spiramycin was detected only in plasma 24 hours after the last dose. On this regimen, parotid and submaxillary gland extracts contained detectable antibiotic for as long as 14 and 21 days. Both mandibular jaw and gingival tissues had detectable antibiotic after doses of 100, 150 and 400 mg/kg for at least seven days after medication was terminated. Denks *et al*⁶¹ looked on the mechanisms of excretion of spiramycin in the human oral cavity. Samples of total saliva, parotid saliva, venous blood and gingiva were taken from patients with progressive marginal periodontitis in 20 tests. Gingival biopsies were divided into the areas close to the pocket and areas close to the oral side. Two days before taking samples, 0.5 gm of spiramycin was administered four times daily. The concentration of the antibiotic was determined with the agar diffusion test. The results suggested that therapeutically effective antibiotic concentrations do not reach the oral cavity exclusively by elimination via the major salivary glands and the saliva, as had been previously supposed, but also may be found within the gingival tissues, especially in the pocket areas and probably also in gingival pocket exudate. Samples from these areas showed spiramycin concentrations that were 10 times greater than all other

samples.

It was concluded that systemic spiramycin was excreted through the crevicular fluid or exudate. Lambrou⁶² compared the excretion in gingival crevicular fluid of penicillin, spiramycin and oxytetracycline after systemic administration and found that spiramycin was the only one excreted in gingival crevicular fluid from the first to the ninth hour after administration.

Laufer *et al*⁵² administered 500 mg of spiramycin to 25 patients three times daily for three days and took samples on day 4 about two hours after another 500 mg dose. They found that spiramycin concentrated in the saliva. The concentration in gingival tissue was about 40 times higher than in serum. The concentration in the bones was even higher — more than 160 times the concentration in serum.

Although the evidence clearly indicates that spiramycin may be of use in the treatment of periodontal disease, further investigation is needed before it can be accepted as a routine form of treatment. Most of the clinical studies involving the use of spiramycin in treating dental infections represent case reports, many of which were poorly documented. To our knowledge, there are only three clinical studies involving the use of commonly accepted research techniques, i.e., the use of controls, double-blind techniques, standardized measurements and statistical analysis of data. These have already been reviewed but will be briefly mentioned again here.

The first study by Winer *et al*⁴⁷ used mentally subnormal patients with moderate to severe periodontitis, and the study lasted for 12 weeks. Local therapy included either scaling and curettage and/or gingivectomy. They reported a significant improvement in patients receiving spiramycin even when no other treatment was given.

The study by Mills *et al*⁴⁸ involved a four-week clinical trial comparing the use of spiramycin, erythromycin and a placebo in treating periodontal disease. The patients received no other form of treatment during this period. Although they found spiramycin to be the more useful in treating periodontal disease, especially in advanced lesions, the length of the study (four weeks) was too short a time to properly evaluate clinical changes in patients. Johnson *et al*,³⁸ during an 11-week period, looked on the ability of spiramycin to reduce supragingival plaque and gingivitis in the absence of mechanical oral hygiene and reported no statistical difference between the experimental and control groups. No data were given on the periodontal status of the patients. It would probably have been more pertinent to study the effect on subgingival plaque, since the quantity of supragingival plaque may not necessarily reflect the destructive abilities of subgingival plaque. As was pointed out by Mills *et al*,⁴⁸ spiramycin seems to be more effective in advanced periodontal lesions rather than in gingivitis.

There is clearly a need for a well-designed longitudinal study which compares the clinical consequences in the

treatment of periodontal disease by scaling and root planing, with and without spiramycin. There are no studies which examine the changes that occur in the microbiota of subgingival plaque when spiramycin is used. This obviously needs to be studied.

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Announcements

CANADA

CDA/ODA 1982 National Convention, The Sheraton Centre, Toronto, Ontario, May 9-12, 1982. Contact: Mrs. W.C. Durham, Convention Manager, Ontario Dental Association, 234 St. George Street, Toronto, Ont. M5R 2P2.

March/mars

Western Canada Dental Society Winter Convention and Curling Bonspiel, Saskatoon, Saskatchewan, March 11-13, 1982. Contact: Dr. D.C. Johnson, 507, 105 — 21 St. E., Saskatoon, Sask. S7K 0B2.

May/mai

College of Dental Surgeons of British Columbia Convention, Hotel Vancouver, Vancouver, B.C., May 2-5, 1982. Contact: Venue West Executive Services Ltd., 1704 1200 Alberni Street, Vancouver, B.C. V6E 1A6.

Canadian Academy of Prosthodontics Annual Meeting, Toronto, Ontario, May 7-8, 1982. Contact: Dr. B.M. Jackson, Secretary-Treasurer, 22-22 Water St. S., Kitchener, Ont. M2G 4K4.

The Canadian Association of Orthodontists 1982 Annual Meeting and Scientific Sessions, The Sheraton Centre, Toronto, Ontario, May 7-10, 1982. Contact: Dr. Eric Luks, Convention Chairman, 5046 - 3080 Yonge Street, Toronto, Ont. M4V 2K6. Phone: (416) 481-4040 or Dr. Ray Bozek, Program Chairman, 7 - 2069 Gore Street, Burlington, Ont. L7R 1E2. Phone: (416) 639-6500.

The Canadian Physiotherapy Association Annual Congress, Hotel Nova Scotian, Halifax, Nova Scotia, May 18-22, 1982. Contact: Chairman of Scientific Subcommittee, Congress '82, P.O. Box 3414, Halifax, N.S. B3J 3J1.

Journées Dentaires du Québec, Queen Elizabeth Hotel, Montreal, Quebec, May 23-27, 1982. Contact: Dr. Morton R. Lang, Journées Dentaires du Québec, 801 Sherbrooke Street East, Suite 303, Montreal, Que. H2L 1K7. Tel. (514) 481-0397.

June/juin

XII Biennial Conference on Canadian Dental Education and Research and Meetings of the ACFD, Dalhousie Uni-

versity, Halifax, Nova Scotia, June 16-21, 1982. Contact: Kaireen Vaisson, Co-ordinator, Continuing Education in Dentistry, Faculty of Dentistry, Dalhousie University, Halifax, N.S. B3H 3J5. Phone: (902) 424-2248.

Alberta Dental Association 1982 Convention (theme "Prosthodontic Patient of 1980's"), Westin Hotel, Edmonton, Alberta, June 9-12, 1982. Contact: Dr. A. Bene or Mrs. F. Ingham, 4044 Dentistry Pharmacy Centre, University of Alberta, Edmonton, Alta. T6G 2N8.

73rd Annual Conference of the Canadian Public Health Association, Explorer Hotel, Yellowknife, Northwest Territories, June 21-24, 1982. Deadline for submitting abstracts is December 31, 1981. For further details contact: Dr. David Martin, Chairman, Scientific Program Committee, c/o Canadian Public Health Association, 1335 Carling Ave., Suite 210, Ottawa, Ont. K1Z 8N8. Phone: (613) 725-3769.

July/juillet

The Sixth Congress of the International Association of Dentistry for the Handicapped, Harbour Castle Hilton Hotel, Toronto, Ontario, July 20-25, 1982. Contact: The Programme Chairman, Sixth Congress I.A.D.H., Dept. of Paedodontics, Faculty of Dentistry, University of Toronto, 124 Edward St., Toronto, Ont. M5G 1G6.

August/août

Second International Congress on Hospital Dental Practice, Four Seasons Hotel, Toronto, Ontario, August 26-29, 1982. Contact: Dr. C.O. Munro, Programme Chairman, 2nd International Congress on Hospital Dental Practice, 124 Edward Street, Toronto, Ont. M5G 1G6.

October/octobre

The Fourth Biennial Symposium on Occlusal Studies, Hyatt Regency Hotel, Vancouver, British Columbia, October 17-20, 1982. Contact: The Society for Occlusal Studies, 1729 South Douglass Road, Anaheim, California 92806, U.S.A. or The Director, Division of Continuing Dental Education, 2199 Westbrook Mall, U.B.C., Vancouver, B.C. V6T 1Z7.

International

March/mars

The Dental Health Section of the American Public Health Association is inviting papers on a broad range of dental health subjects. This year's theme is "Aging & Public Health: International Perspectives". Deadline date for abstracts March 12, 1982, for presentation at the Association's 110th Annual Meeting, Montreal, Quebec, November 14-18, 1982. Contact: Alic M. Horowitz, 6307 Herk Court, Bethesda, MD 20817, U.S.A.

April/avril

Annual Scientific Conference of the Irish Dental Association, Limerick Inn Hotel, Ennis Road, Limerick, Ireland, April 21-25, 1982. Contact: Declan Corcoran, Public Relations Officer, Irish Dental Association, 29 Kenilworth Square, Dublin 6, Ireland.

May/mai

1982 World's Fair, Knoxville, Tennessee, May 1 — October 31, 1982. Contact: Anne Russell, Director of Special Affairs, City of Knoxville, P.O. Box 1631, Knoxville, Tennessee 37901, U.S.A. Phone: (615) 521-2549.

Australian Dental Association, 23rd Dental Congress, Perth, Australia, May 2-7, 1982. Contact: Australian Dental Association, 23rd Dental Congress, P.O. Box 29, Parkville, Victoria, Australia, 3052.

The Dental Association of South Africa, Diamond Jubilee Congress, Durban, South Africa, May 10-14, 1982. Contact: Dr. Helmut Heydt, Executive Secretary, Dental Association of South Africa, Private Bay One, Houghton, 2041, South Africa.

XIth Annual Meeting of the European Academy of Gnathology, Convention Centre, Paris, May 19-22, 1982. Contact: XI^e Congrès de Gnathologie, P.M.V., B.P. 246, 92205 Neuilly-sur-Seine, France.

The International Congress of Oral Implantologists World Congress VI for Oral Implantology, Hyatt Regency Hotel, Maui, Hawaii, May 21-23, 1982. Contact: Mr. Clifford J. Kirschner, Executive Director, The International Congress of

Oral Implantologists, P.O. Box 2277,
Grand Central Station, New York, N.Y.
10163, U.S.A.

June/juin

The 88th Annual Meeting of the American Dental Society of Europe, Park Hotel, Sandefjord, Norway. June 28-July 2, 1982. Contact: Hon. Sec. Dr. Brian J. Parkins, 57 Portland Place, London W1N 1AH, England.

The University of Texas — Applications are being accepted for the Postdoctoral Program, Dental Diagnostic Science at the University of Texas Health Science Center at San Antonio, for the class beginning July 1, 1982. Contact: Office of the Associate Dean for Advanced Education, Dental School, The University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Dr., San Antonio, Texas 78284, U.S.A.

July/juillet

The Pan-Pacific International Symposium on Biomaterials, University of British Columbia, Vancouver, British Columbia, July 28-30, 1982. Papers are invited (closing date April 2, 1982) on biomaterials especially in orthopedic, cardiovascular and dental materials and tissue mechanics. Contact: Dr. R.H. Roydhouse, Secretariat at Biomaterials '82, 1704, 1200 Alberni St., Vancouver, B.C. V6E 1A6.

September/septembre

Asociacion Argentina de Ortopedia Funcional de Los Maxilares, 25th Anniversary, Buenos Aires, Argentina, September 19-23, 1982. Contact: Dr. S.A. Gandolfo, Secretario, Asociacion Argentina de Ortopedia Funcional de Los Maxilares, Buenos Aires, Argentina.

October/octobre

Fédération Dentaire Internationale, 70th Annual World Dental Congress, Vienna, Austria, October 11-16, 1982.

Future meetings of the ACFD AFDC are scheduled to take place in Halifax (1982), Dalhousie: Edmonton (1983), University of Alberta; and Winnipeg (1984). University of Manitoba.

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BRITISH COLUMBIA — Vancouver. Downtown, two operator dental office available for part-time rental with purchase option. Phone: (604) 669-7467 (business) or 266-4986 (residence).

BRITISH COLUMBIA — East Coast Vancouver Island. Practice for sale or lease. Beautifully situated in three dentist town in recently built office. Busy general practice. Three operatories, panelipse, lab, private office, etc. Opportunity for waterfront or rural living, but only 20 minutes from two major towns and 50 minutes from Victoria. Phone: (604) 245-7195 (office) or 245-7394 (residence).

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ALBERTA — Calgary. Family practice for sale in expanding suburb area. Two fully equipped operatories, third plumbed and wired. Will consider period of associateship before purchase, and willing to finance. Phone: (403) 262-3826 (business) or 238-3600 (residence).

ALBERTA — Pincher Creek. Practice for sale. Owner wishes to return to school. Opportunity for one or two dentists. Any combination of practice, building, equipment etc. offered. Very reasonable terms. Phone: (403) 627-3290.

MANITOBA — Winnipeg. For sale: Downtown practice in air-conditioned modern professional building. Two modern well equipped operatories. Fully equipped lab, space shared with another dentist. Hygienist operator. Price includes half share in all common property. X-rays; hygienists; business office etc. Established over 40 years. Owner wishes to retire. Terms can be negotiated if necessary. Contact: Dr. F.W. Jones, 505 Dental Arts Building, 225 Vaughan St., Winnipeg, Man. R3C 1T2. Phone (204) 943-4521 (office) or 489-4710 (home).

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ALBERTA — Calgary. Associate required for busy dental office. Contact: Dr. J.T. Boulton, 7 Parkdale Crescent N.W., Calgary, Alta. T2N 3T8. Phone: (403) 283-5596.

ALBERTA — Innisfail. Associate required for well equipped, busy general and preventive practice (or office space available with cost sharing). Reply to: P.O. Box 339, Innisfail, Alta. T0M 1A0 or phone (preferably after 9:00 p.m. evenings): (403) 886-5544 or 227-5312 (office).

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Opportunities Available

BRITISH COLUMBIA — Vancouver. Pedodontist needed in busy specialty practice. Full time position, available immediately. Please write to CDA Box Number 2083.

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UNIVERSITY OF SASKATCHEWAN — College of Dentistry, requires Dental Technician II, to provide technical support to the teaching program of the College in the fabrication of dental prostheses using gold and other semi-precious metals involving some relatively complex and specialized technics and procedures. Completion of a recognized course in dental technology and several years of related experience are preferred qualifications. Salary range: \$1,874 to \$2,1726 per month. Contact: Dr. G.A. Riekman, Associate Dean, College of Dentistry, University of Saskatchewan, Saskatoon, Sask. S7N 0W0.

UNIVERSITY OF SASKATCHEWAN — College of Dentistry, A vacancy for a full-time faculty member exists in the Division of Oral Medicine/Oral Diagnosis. College of Dentistry, University of Saskatchewan. Applicants should have postgraduate training in, or related to, Oral Diagnosis/Oral Medicine, and should be eligible for licensure with the College of Dental Surgeons of Saskatchewan. Responsibilities include teaching undergraduate courses related to Oral Medicine/Oral Diagnosis, supervision of related clinical activities, and co-operating with other faculty when screening patients for College Teaching Clinics. Research facilities are available and the adjacent University Hospital Dental Residency Program may provide useful resources. Consulting and Practice Privileges to a maximum of two half days per week are permitted, either on or off base. An Intramural Practice Unit is provided for faculty who wish to utilize on base facilities. Salary and rank commensurate with qualifications and experience. Interested applicants should send curriculum vitae and related documentation with at least three names for reference purposes to: Dean E.R. Ambrose, College of Dentistry, University of Saskatchewan, Saskatoon, Sask. S7N 0W0.

UNIVERSITY OF SASKATCHEWAN — College of Dentistry, Applications are invited for a full-time position in the Department of Oral Biology, College of Dentistry, University of Saskatchewan, with primary responsibility for teaching oral physiology. The applicant should have a dental degree and post graduate training in physiology. Emphasis will be placed on the potential of the individual to develop an independent research program. The Department teaches anatomy, physiology, biochemistry, microbiology and pathology in relation to the oro-facial complex and the program extends the entire five years of the undergraduate dental curriculum. Clinical involvement is actively encouraged. Salary will be determined according to qualifications and experience. Letters of application, curriculum vitae and the names of three individuals from whom references can be obtained should be sent to: Dr. E.R. Ambrose, College of Dentistry, University of Saskatchewan, Saskatoon, Sask. S7N 0W0. Canada.

MANITOBA — Winnipeg. Oral surgeon certified to practise in Manitoba required for a busy practice. Object partnership. Please submit qualifications and curriculum vitae and recent photo to CDA Box Number 2086.

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ONTARIO — Oakville. Locum: Dentist to assume general practice for month of March, 1982. Attractive terms. Phone (416) 827-0309.

Opportunities Wanted

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ONTARIO Hamilton-Burlington area. Graduate of University of Toronto 1967. Recently sold lucrative private practice; wishes to practice now in a less stressful mode. Resume sent upon request. Reply to CDA Box Number 2097.

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1. Zacherl, W. A., "Clinical Evaluation of a Sodium Fluoride-Silica Abrasive Dentifrice." *Journal of Dental Research*, Vol. 60, Special Issue A, page 577, March, 1981.
2. Beiswanger, B. B., Gish, C. W. and Mallatt, M. E., "Effect of a Sodium Fluoride-Silica Abrasive Dentifrice Upon Caries." *Journal of Dental Research*, Vol. 60, Special Issue A, page 577, March, 1981.



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Vol. 48 No. 3

Canadian
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March
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Membership in the Federation Dentaire Internationale for 1982 is now open for new or renewed membership. Supporting membership from Canada in 1981 increased considerably and it is hoped that improvement will continue. After the March 1982 issue, only those who renew their membership will continue to receive the Newsletter and in addition, it is necessary to be a supporting member to attend the outstanding Congress planned for Vienna, Austria on 10-16 October, 1982.

Registrants to FDI world congresses must be supporting members of the Federation. To be eligible for supporting membership, Canadian dentists must be members of the Canadian Dental Association.

The subscription fee is \$35 (Canadian) or in combination with a subscription to the International Dental Journal \$60 (Canadian). We urge you not only to become a member but to encourage your colleagues to join as well.

Your membership fee is your contribution in support of FDI in its efforts to promote improved dental health on a worldwide basis in direct exchange of scientific knowledge and expertise. A portion of the fee will also be used by the CDA to offset administrative expenses associated with the FDI membership program.

Please return the attached form with your remittance without delay to the Canadian Dental Association, 1815 Alta Vista Drive, Ottawa, Ontario K1G 3Y6.

Application forms for the Vienna congress will be sent with your receipt and 1982 membership card.

CANADIAN DENTAL ASSOCIATION 1815 Alta Vista Drive, Ottawa, Ontario

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THIS IS NOT A LICENCE FEE, this is your remittance for annual supporting membership. Please return this form with your remittance payable to CDA. A receipt and membership card will be issued.

Adhésion à la Fédération Dentaire Internationale

On peut maintenant se joindre à la Fédération dentaire internationale ou y renouveler son adhésion pour l'année 1982. En 1981, le nombre des membres de soutien canadiens s'est accru considérablement et on espère qu'il continuera à s'accroître. Seuls ceux qui renouvelleront leur adhésion continueront à recevoir le Bulletin après la parution du numéro de mars. De plus, on doit être membre de soutien de la F.D.I. si on désire assister au fabuleux congrès qui doit se tenir à Vienne, en Autriche, du 10 au 16 octobre 1982.

Les personnes voulant participer à ce congrès mondial doivent être membres de soutien de la Fédération, et pour pouvoir être membres de soutien de la F.D.I., les dentistes canadiens doivent être membres de l'Association dentaire canadienne.

Pour se joindre à la F.D.I., la cotisation est de 35\$ canadiens, et de 60\$ canadiens si l'on désire recevoir en plus le Journal dentaire international. L'Association dentaire canadienne vous exhorte non seulement à vous joindre à la F.D.I., mais aussi à encourager vos collègues à s'y joindre.

En devenant membre de la F.D.I., vous donnez votre appui à un organisme dont le but est d'améliorer la santé dentaire à l'échelle mondiale conjointement avec l'Organisation mondiale de la santé et grâce à des échanges de connaissances scientifiques sur le plan international. Une partie des frais de cotisation sert également à couvrir les frais d'administration encourus par l'A.D.C. en rapport avec le programme de recrutement de la F.D.I.

Veuillez remplir le formulaire ci-joint et le retourner avec votre contribution à l'Association dentaire canadienne, 1815, promenade Alta Vista, Ottawa (Ontario) K1G 3Y6.

Les formulaires d'inscription au congrès de Vienne vous parviendront avec votre reçu et votre carte de membre pour l'année 1982.

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1. Zacherl, W. A., "Clinical Evaluation of a Sodium Fluoride-Silica Abrasive Dentifrice." *Journal of Dental Research*, Vol. 60, Special Issue A, page 577, March, 1981.

2. Beiswanger, B. B., Gish, C. W. and Mallatt, M. E., "Effect of a Sodium Fluoride-Silica Abrasive Dentifrice Upon Caries." *Journal of Dental Research*, Vol. 60, Special Issue A, page 577, March, 1981.

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Orthodontics

National
Dental
Health Month**Editorial**

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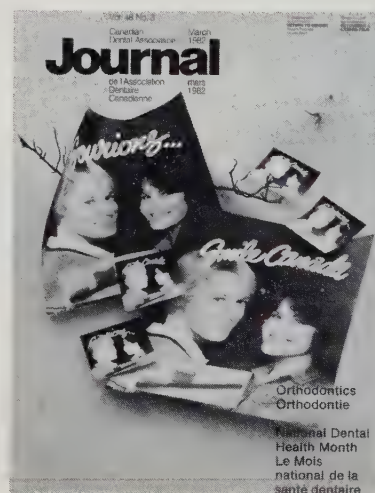
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Orthodontie

Le Mois
national de
la santé
dentaire

CDA/ODA — Toronto, May 9-12

The Sheraton Centre Hotel at 123 Queen Street West in Toronto will host this year's joint convention of the Canadian Dental Association and the Ontario Dental Association.

Clinic highlights

Dr. A.T. Storey, of Winnipeg, will present The Grieve Memorial Lecture at 9 am on Monday, May 10. His topic, "New perspectives in occlusion and malocclusion," discusses paralleling the increasing functional emphasis in occlusion as a shift from a static to a dynamic concept of malocclusion. Clinical cases and recent research will be used to illustrate interactions and to demonstrate their importance in treatment planning and execution.

Dr. Louis W. Ripa of Stony Brook, N.Y., will present "Toward the elimination of dental decay in the child patient," from 9 to 11 am. He will cover fluoride therapy, professionally applied topical fluorides and systemic fluoride supplements.

From 2:30 to 4:30 pm, Dr. Ripa will discuss occlusal sealants—rationale, technique and efficacy and the histologic basis of acid etching. This session will be aimed at the Canadian Association of Pedodontists but all convention registrants are welcome to attend.

From 9 to 11 am, Dr. C.G. Brodie-Brockwell, of Lindsay Ontario, will discuss "The excusory angle and myofascial pain dysfunction (MPD)" showing common occlusal abnormalities (frequently unrecognized) which lead to migraine-like symptoms for which the patient often mistakenly goes to a medical practitioner. The seven types of abnormalities will be discussed with suitable treatment. This clinic will be repeated on Tuesday afternoon.

"The endosseous blade implant and the subperiosteal implant — 12 years post-operative" is the topic of a clinic being presented by Dr. Joseph Druck, Toronto, from 9 to 11 am. It will be an illustrated discussion projecting employment of the Linkow Blade in the broad field of restorative dentistry. The mandibular subperiosteal implant will also be discussed. Dr. Druck will repeat this clinic on Tuesday morning.

Dr. Gary E. Pitkin, Toronto, will speak on "The medical-legal aspects of cardiopulmonary resuscitation" from 9 to 11 am when he will address many controversial issues regarding the provision of CPR by qualified individuals.

From 2:30 to 4:30 pm Dr. Simon Weinberg, Toronto, will give a clinic on "Complications during and after oral surgery." Dr. Weinberg will discuss and offer practical tips on displacement of tooth, root or foreign body in the

maxillary sinus, infratemporal fossa, mandibular canal and floor of mouth, injuries to adjacent teeth and other complications. This clinic will be repeated on Tuesday morning.

On Monday from 2:30 to 4:30 pm, Dr. H. Jack Stockton, Winnipeg, will present "Tax and investment planning for dentists," covering principles of tax and investment planning, financial freedom, tax shelter investments, debt management strategies, miscellaneous investments and some 'aggressive' tax strategies.

"Occlusal adjustment of the natural dentition" will be presented by Dr. F.C. Lackie, Toronto, on Monday from 2:30 to 4:30 pm. This clinic will cover a brief history of the various schools of thought and their approach to occlusal adjustment — selective grinding. A repeat is slated for Wednesday morning from 9 to 11 am.

An innovation this year, will be "mini-clinics" held from 2:30 to 4:30 pm on Monday and repeated at the same time on Tuesday. Each clinic runs for 45 minutes, immediately followed by another clinic on a different topic.

On Tuesday, May 11, Dr. Herbert T. Shillingburg, Jr., Oklahoma City, Okla., will present a clinic from 9 to 11 am and 2:30 to 4:30 pm on "A simplified approach to cast restorations." He will explore ways to avoid some of the common problems in doing cast restorations.

Also on Tuesday morning, Dr. W.K. Hettenhausen, Thunder Bay, Ontario, will discuss "Generating health in the oral environment." This program is designed to encourage both practitioners and auxiliaries to adopt a health-generative approach to dentistry. The presentation will be repeated on Wednesday morning.

On Tuesday afternoon from 2:30 to 4:30, Dr. Joel J. Edelson, Toronto, will present "Surgical endodontics: a step-by-step approach." During a dentist's practice it often becomes critically important to save a particular tooth but many dentists are reluctant to perform endodontic surgery because of lack of knowledge of basic principles.

Once the basic techniques are mastered, many simple endodontic surgical procedures can be done by the average family dentist. This presentation will illustrate the indications, techniques and precautions exercised in a simple step-by-step approach for successful surgical treatment. Dr. Edelson's clinic will be repeated on Wednesday morning.

Also on Tuesday afternoon, Mr. B.S. Wortzman, Toronto, will give a presentation on jurisprudence, repeated on Wednesday morning.

Congrès ADC/ODA — Toronto, du 9 au 12 mai

C'est au Centre Sheraton, situé au 123 ouest, rue Queen, à Toronto, que se tiendra, du 9 au 12 mai 1982, le Congrès mixte de l'Association dentaire canadienne et de l'Association dentaire de l'Ontario.

Programme clinique

La conférence en mémoire du Dr Grieve aura lieu le lundi, 10 mai, à 9 heures, et sera prononcée par le Dr A.T. Storey, de Winnipeg, qui parlera des "nouvelles optiques touchant l'occlusion et la malocclusion." Le Dr Storey mettra en parallèle les concepts statique et dynamique de la malocclusion en montrant que les dentistes actuels tendent à adopter le second. Il illustrera son exposé au moyen de cas cliniques et des résultats des dernières recherches. De plus, il fera ressortir l'importance de la planification du traitement tout comme du traitement proprement dit.

À la même heure, le Dr Louis W. Ripa, de Stony Brook (New York), présentera une conférence intitulée: "Pour aider à éliminer la carie chez les enfants." Le Dr Ripa parlera de la thérapie au fluor, des applications topiques et des suppléments fluorés.

Durant l'après-midi, de 14h30 à 16h30, le Dr Ripa présentera un exposé raisonné sur les matériaux de scellement pour l'occlusion, la technique d'application, leur efficacité et le fondement histologique du mordantage. Bien que cette séance s'adresse particulièrement à l'Association canadienne des pédodontistes, tous les congressistes peuvent y assister.

Toujours le lundi, 10 mai, de 9 heures à 11 heures, le Dr C.G. Brodie-Brockwell, de Lindsay (Ontario), parlera de "l'angle de mouvement buccal et la douleur causée par le dysfonctionnement des muscles faciaux" et montrera les anomalies d'occlusion communes qui, souvent, ne sont pas repérées. Parce qu'elles sont responsables des symptômes qui ressemblent à ceux de la migraine, ces anomalies induisent fréquemment le patient en erreur et le conduisent chez le médecin plutôt que chez le dentiste.

Aux mêmes heures, le Dr Joseph Druck, de Toronto, présentera une conférence clinique intitulée: "Implant endo-osseux et implant sous-périosté — douze ans après l'opération." Cette conférence sera illustrée et fera état de l'emploi de la lame de Linkow en dentisterie restaurative ainsi que de l'implant sous-périosté de la mandibule. Cette conférence sera répétée le lendemain matin.

Également de 9 heures à 11 heures, le 10 mai, le Dr Gary E. Pitkin, de Toronto, parlera des "aspects médico-légaux de la réanimation cardio-pulmonaire", abordant plusieurs points qui prêtent à controverse touchant la réanimation

par des personnes compétentes.

De 14h30 à 16h30, le même jour, le Dr Simon Weinberg, de Toronto, tiendra une clinique sur "les complications survenant durant et après une opération buccale."

En même temps, le Dr H. Jack Stockton, de Winnipeg, présentera un exposé sur "l'impôt et la planification des placements pour les dentistes". Il donnera les principes fondamentaux en matière d'impôts et de planification des placements, parlera de la liberté économique, expliquera les placements en tant qu'abris fiscaux, proposera des moyens pour gérer les dettes, énumérera les divers placements possibles et suggérera quelques moyens "audacieux" pour réduire l'impôt.

Toujours dans l'après-midi du lundi, 10 mai, de 14h30 à 16h30, le Dr F.C. Lackie, de Toronto, présentera une conférence ayant pour titre: "Rectification de l'occlusion de la denture naturelle." Le Dr Lackie donnera un bref aperçu historique des diverses écoles de pensée et de leur façon de rectifier l'occlusion — le meulage sélectif.

Pour la première fois, on tiendra cette année des mini-cliniques de 14h30 à 16h30 le lundi et on les répétera aux mêmes heures le mardi. Chaque clinique durera 45 minutes et sera suivie d'une autre clinique sur un sujet différent.

Mardi, le 11 mai, le Dr Herbert T. Shillingburg fils, d'Oklahoma City (Oklahoma), présentera une clinique de 9 heures à 11 heures, puis de 14h30 à 16h30. Le sujet en sera "une approche simplifiée des restaurations au moyen de modèles". Le Dr Shillingburg indiquera des moyens pour éviter quelques-uns des problèmes communs rencontrés dans ce genre de restauration.

Le mardi matin également, le Dr W.K. Hettenhausen, de Thunder Bay (Ontario), fera un exposé sur "la manière de promouvoir la santé dans l'environnement buccal". Cette conférence a pour but d'encourager tant le dentiste que l'auxiliaire à adopter une conception de la médecine dentaire comme moyen de promouvoir la santé. Reprise le mercredi matin.

Durant l'après-midi, de 14h30 à 16h30, le Dr Joel J. Edelson, de Toronto, donnera une conférence intitulée: "L'endodontie chirurgicale: approche méthodique". Très souvent, il importe sérieusement de sauver une dent, mais le dentiste répugne à l'idée d'effectuer une opération de la pulpe dentaire parce qu'il ignore les principes fondamentaux.

Toujours le mardi après-midi, M. B.S. Wortzman, de Toronto, présentera un exposé sur la médecine légale, qu'il répétera le lendemain matin.

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Ten questions your patients may ask about the new low-calorie sweetener, NutraSweet™

Recently, foods and beverages made with a completely new kind of food sweetener, NutraSweet* aspartame sweetener, were introduced in the marketplace. Here are the answers to some of the most frequently asked questions about this revolutionary new product.

1. Exactly what is NutraSweet?

NutraSweet is not a sugar. NutraSweet is a sweet, nutritive substance made of protein components like those found naturally in most foods. It is a sweet compound of two amino acids, aspartate and phenylalanine.

2. What foods are made with NutraSweet?

A variety of foods are made with NutraSweet: carbonated soft drinks, pre-sweetened cereals, instant puddings and dessert toppings, flavored crystal beverages and chewing gum.

Equal® (Égal® in French), the new low-calorie tabletop sweetener in packets and tablets, is also made with NutraSweet.

3. Can NutraSweet reduce calories in foods? NutraSweet sweetens with far fewer calories than sugar. For example, a teaspoon of sugar contains 16 calories. NutraSweet delivers equivalent sweetness with only 1/10 of one calorie. That means, in some foods made with NutraSweet, *calories may be reduced as much as 95 percent* (see chart below).

4. Can children have foods made with NutraSweet? Unlike many non-nutritive sweeteners, NutraSweet has been clinically tested with people of all ages.** If a person consumes an amount of NutraSweet equivalent in sweetness to one teaspoon of sugar, he takes in 8.5 mg. of aspartate and 10.6 mg. of phenylalanine. By way of comparison, he takes in 50 times

these amounts when he drinks an 8 oz. glass of milk.

5. Are foods made with NutraSweet more nutritious? Sometimes. For example, a pre-sweetened cereal made with NutraSweet can offer more protein,



fiber, vitamins and minerals per serving than the same size serving made with sugar. That's because sugar's bulk and calories can be replaced with more cereal grain.

6. Can NutraSweet help reduce tooth decay? Too many sweets in the diet, combined with poor dental habits, contribute to tooth decay. While diet is only one factor, substituting foods made with NutraSweet for sugar-sweetened foods may help to reduce cavities.

Supporting this theory are studies conducted by the U.S. National Institute of Dental Research that showed use of NutraSweet was not associated with the formation of cavities in animals***.

7. Can persons with diabetes eat the foods made with NutraSweet? NutraSweet is wel-

come news for persons with diabetes because it is digested and utilized by the body as protein. That means some foods and beverages formerly high in sugar may soon be enjoyed because with NutraSweet most beverages will be totally sugar-free and other foods will be significantly reduced in carbohydrates.

8. Can pregnant women use NutraSweet? On the basis of animal and clinical studies, Health and Welfare Canada concluded that NutraSweet does not present an additional risk to pregnant women. The amino acids from NutraSweet

will be less than 1% of the total protein consumed over a day. And, consuming foods and beverages made with NutraSweet is just like eating other foods containing the same protein components.

9. Does NutraSweet really taste like sugar? In two

separate studies conducted at a leading university in New York, people were fed a diet that contained sugar-sweetened foods. Occasionally, foods sweetened with NutraSweet were substituted without the subjects' knowledge. Most subjects could not tell the difference between the foods sweetened with NutraSweet and the same foods sweetened with sugar.

10. Can NutraSweet help me control my weight? Eating foods made with NutraSweet allows you to reduce your daily calorie intake, yet still satisfy your sweet tooth. And because foods made with NutraSweet taste like high-calorie foods, they can help make even a restrictive diet more palatable.

*NutraSweet is a brand name of G.D. Searle & Co. for the sweetener aspartame (APM).

**NutraSweet contains phenylalanine. Physicians with phenylketonuric patients may request additional information on foods made with NutraSweet by calling (1-800) 268-1120 and in British Columbia (112-800) 268-1120.

***Copies of this study may be obtained by calling the 800 telephone number mentioned above.

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Compare the difference in calories: Food

	Containing Sugar	Containing NutraSweet
Hot chocolate (8 oz.)	116 calories	64 calories
Carbonated soft drink (10 oz.)	120 calories	1 calorie
Gelatin dessert (½ cup)	81 calories	10 calories
Whipped topping (4 Tbsp.)	56 calories	28 calories
Chocolate pudding (½ cup)	150 calories	75 calories
Milk shake (1½ cups)	284 calories	135 calories

**The
NutraSweet
Breakthrough**

Membership in FDI Discussed

It is interesting to note that the Editorial in the December issue of the CDA Journal makes mention of the fact that controversial issues cannot be ignored and for that reason the concerns of the profession about alternate delivery systems have been examined.

In the same issue, an article on the FDI World Dental Congress must be closely dissected if the average member is to realize the implications of what actually occurred in Rio de Janeiro, for the FDI has also been a topic of controversy over the past few years.

We are told that considerable discussion at all levels, formally and informally, was directed at the financial situation of the FDI and that the CDA delegation withdrew the 1980 resolution relating to finances, but stated the need for continuing effort to effect a more equitable base for the annual dues structure.

The CDA then supported the American Dental Association resolution for a 25 per cent ceiling on member association dues payable by any one member association.

Nevertheless, the 1980 FDI budget due to increased expenditures and decreased income will result in reduced expenditures in 1982 and increased dependence on predictable income, such as, member association dues and less on the variable aspects, such as, supporting membership dues and attendance at congresses.

The membership is not reminded, however, that in 1980 the CDA resolution was just the opposite in nature. At that time, the CDA requested increased dependence on individual supporting membership dues and less dependence on member association dues, particularly when the CDA was told that it would be difficult to use any other base than the per capita income of a country rather than, let us

say, the per capita income of the dentist. This formula for determining member association dues, unfortunately results in some countries paying almost nothing as a member association even though the dentists are reporting high incomes.

By supporting the ADA motion, the CDA did what was right as it is basically not fair for one country to have to carry such a major burden of the expenses, especially when a minority of American dentists belong to the FDI. Nevertheless, support of this motion will result in a slight increase in member association dues payable by the Canadian Dental Association.

With approximately 10,000 dentists in Canada and not even 10 per cent of these dentists joining the FDI one may ask if the CDA is justified spending over \$30,000 from its revenue to be part of international dentistry and to participate at the annual congress.

Payment of our annual member association dues of approximately \$14,000 without the cost of travel, per diems and participation is an alternative. Another alternative is to not be a member association as per CDA's position in 1980 and to simply let each member join if he sees fit to do so, for want of being a part of international dentistry or for want of having the possibility of deducting travel expenses to the Annual Congress. Unfortunately, with such an alternative the eight (8) Canadian consultants to FDI would lose their status.

The alternatives and controversy are not only particular to Canada as the same line of questioning is being generated south of the border. As a matter of fact, the Board of Trustees of the American Dental Association at its October, 1981, session submitted the ADA's resignation as a member association of the FDI, effective December 31, 1981. It appears that

the ADA having implemented financial restraints in many areas has taken on CDA's original position and will not renew its membership unless substantial changes are proposed by FDI.

It is time, therefore, that we let our views be known by contacting our Governors (for addresses see January CDA Journal) who represent the profession across the country when they sit as members of the Board of Governors of the Canadian Dental Association.

With double digit inflation and pressing problems at home, the Canadian Dental Association may wish to once again review their status as a member association, for with what the FDI plans to implement in the future our participation will result in increased costs for the CDA when a very small minority of Canadian dentists belong to the Fédération Dentaire Internationale.

*Clyde Covit, D.D.S.
Montreal, Quebec*

Sedation Techniques Questioned

Having used the sedation combination of meperidine, chlorpromazine and promethazine, as suggested by Drs. Riekman and Ross, for over two years and having abandoned it in favor of other techniques, I would like to offer some comments for readers to consider.

Meperidine has a duration of effect that is usually longer than required for most dental procedures. When administered intramuscularly, it reaches a peak serum level near the time the chairside procedures are completed. Dismissing the patient at this time is not advisable or safe and therefore a

recovery room or a modified operating room is necessary.

Intramuscularly administered drugs are usually more predictable in their actions than are orally administered ones. I did not find this to be the case with this combination; in fact I found the old standby of oral chloral hydrate and hydroxyzine to be as predictable, if not more so. When one considers the significantly wider safety margin of this oral combination, the advantage of the intramuscular combination is hard to find.

The authors make mention of the extrapyramidal side effects of chlorpromazine. These are more than passing reference. These side effects are not infrequent, are often bizarre, and may be frightening to parent(s), operator and patient. This problem with chlorpromazine may well outweigh the merits of its inclusion in any combination for sedating the pediatric patient.

From my experience with this technique for conscious sedation, I did not find it as neat and easy or as predictable as the authors have led us to believe. Given the potential and real problems with this particular combination, I would urge readers to consider alternatives: either the safer oral combination or other more predictable and shorter duration intramuscular combinations.

*Douglas G. Campbell
B.Sc., D.M.D., Cert. Pedo.*

Technique Not New

The article entitled "Simplified bleaching of discolored pulpless teeth" in the November issue of the C.D.A. Journal is certainly a well-written and researched description of endodontic bleaching up to a point.

The point I have in mind is the fact that I have been using the identical technique for at least 15 years. I do not claim to have originated this technique, therefore it must have been developed many years before I learned about it.

While I was head of the Department of Endodontics at the University of Manitoba I taught this technique to my students. I also described one-appointment bleaching in many clinics I gave across both North and South America. Thus I am certain many of your readers are familiar with the steps described by Drs. Lemieux and Todd.

If the purpose of your Journal is to refresh the minds of dentists with techniques of merit then publishing this article was justified. However if your objective is to print solely original ideas then you have misled your audience.

*Dr. Isadore Wolch
Winnipeg, Manitoba*

Thanks to CFDE

I am writing this letter to publicly thank the Canadian Fund for Dental Education and all dentists who contribute to the fund. I am nearing the completion of a Master's program and were it not for the CFDE and its contributors I would have had great difficulty in achieving this goal. The skills and knowledge that I have acquired will now help to train future practitioners in our profession. Thanks again to everyone who helps make these goals possible by their generous contributions.

*Dr. Dale A. Miles
University of Texas*

Mise au point

Nous avons lu avec beaucoup d'intérêt la revue du mois de novembre 1981 publiée par votre Association (numéro 11).

Nous aimerions porter votre attention à l'article "A la recherche d'une deuxième carrière" de la page 708. Il s'agit du troisième paragraphe de la deuxième colonne qui définit les responsabilités gouvernementales en matière de santé dentaire.

Nous reconnaissons que ce qui y est écrit s'applique aux Indiens du Canada, mais depuis la signature de la Convention de la Baie James et du Nord québécois en 1975 par les gouvernements du Canada et du Québec, des représentants des entités autochtones crie et inuit, la responsabilité des services de santé et des services sociaux est de compétence québécoise.

C'est pour répondre à cette prise en charge du Québec que les établissements hospitaliers de la Baie James et de Kuujuaq ont été autorisés à engager des dentistes pour assurer la prestation des services de santé dentaire sur tout le territoire du Nouveau-Québec où vivent plus de 12 000 autochtones.

*Roger Richard
Chef du Service du Nouveau-Québec
et des Communautés autochtones
Gouvernement du Québec
Ministère des Affaires sociales*

*c.c.: M. Jean-Paul Fortin, Directeur,
Santé communautaire et services
aux communautés autochtones*

Bedford Appointed



The Deputy Minister of National Health and Welfare, Mr. J.L. Fry, the Assistant Deputy Minister, Health Services and Promotion Branch, Dr. Maureen Law and the Assistant Deputy Minister, Medical Services Branch, Dr. L.M. Black, are pleased to announce the appointment by the Public Service Commission of Dr. William Bedford to the position of Senior Consultant, Dentistry, Health Services and Promotion Branch and Medical Services Branch. This appointment is a joint venture between the two branches.

In this position Dr. Bedford is now a non-voting member of the CDA Board of Governors.

Dr. Bedford maintained a private practice in dentistry in Richmond Hill, Ontario, from 1959 to 1974 and from 1975 to 1976. During this period he was associated with the Faculty of Dentistry at the University of Toronto, first as a part-time clinical instructor and during 1974 to 1975 as a dental teacher and instructor on a full-time basis at the School of Dental Therapy in Fort Smith, Northwest Territories.

In 1976, Dr. Bedford joined Medical Services Branch, Manitoba Region, as the regional dental officer. In this position he also assumed the responsibilities of acting director, Health Support Services for an 18-month period. In March, 1981, he was seconded to headquarters of Medical Services Branch in Ottawa as dental consultant.

Motrin (ibuprofen)

Product Information

Action: Ibuprofen has demonstrated anti-inflammatory, analgesic and antipyretic activity in animal studies designed to specifically demonstrate these effects. Ibuprofen has no demonstrable glucocorticoid effect.

Following a single 200 mg dose of ibuprofen in humans, useful blood levels were demonstrable in 45 minutes and still present in six hours but at barely detectable levels. Peak levels occurred at approximately one hour after ingestion. Levels were lower when taken in conjunction with food.

Ibuprofen is rapidly metabolized and eliminated in the urine. The excretion of ibuprofen is virtually complete 24 hours after the last dose. The serum half-life of ibuprofen is 1.8 to 2 hours. There is no evidence of drug accumulation or enzyme induction.

Ibuprofen has been found to be less likely to cause gastro-intestinal bleeding in doses usually used than is acetylsalicylic acid.

Clinical trials in man have shown activity of a dose of 1200-1800 mg of ibuprofen daily to be similar to that of 3.6 grams of acetylsalicylic acid daily.

Indications and Clinical Uses: Motrin (ibuprofen) is indicated for the treatment of rheumatoid and osteoarthritis. Motrin is also indicated for the relief of mild to moderate pain, accompanied by inflammation, in conditions such as musculo-skeletal trauma and post-dental extraction. Motrin is also indicated for the relief of pain associated with dysmenorrhea.

Contraindications: Ibuprofen should not be used in patients who have previously exhibited hypersensitivity to it, or in individuals with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to acetylsalicylic acid or other nonsteroidal anti-inflammatory agents. (see WARNINGS).

Ibuprofen should not be used during pregnancy, in nursing mothers or in pediatric patients because its safety under these conditions has not been established.

Warnings: Anaphylactoid reactions have occurred in patients with known A.S.A. hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported in patients receiving ibuprofen. Peptic ulceration, perforation, or severe gastrointestinal bleeding can have a fatal outcome, and although few such reports have been received with ibuprofen, a cause and effect relationship has not been established. Ibuprofen should be given under close supervision to patients with a history of upper gastrointestinal tract disease.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in colour vision have been reported. If a patient develops such complaints while receiving ibuprofen, the drug should be discontinued and the patient should have an ophthalmologic examination.

Fluid retention and edema have been reported in association with ibuprofen, therefore, the drug should be used with caution in patients with a history of cardiac decompensation or renal disease.

Ibuprofen, like other nonsteroidal anti-inflammatory agents, can inhibit platelet aggregation but the effect is quantitatively less and of shorter duration than that seen with acetylsalicylic acid. Ibuprofen has been shown to prolong bleeding time (but within the normal range) in normal subjects. Because this prolonged bleeding effect may be exaggerated in patients with underlying hemostatic defects, ibuprofen should be used with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients on ibuprofen should be cautioned to report to their physicians signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

When ibuprofen is added to the treatment program of patients who have been on prolonged corticosteroid therapy, and it is decided to discontinue this therapy, the corticosteroid should be tapered slowly to avoid exacerbation of disease or adrenal insufficiency.

Aseptic meningitis has been reported in connection with ibuprofen therapy in patients with systemic lupus erythematosus. Such patients may also develop hypersensitivity reactions to ibuprofen such as fever, rash or abnormal liver function more often than those with other disorders. Caution should therefore be exercised when considering ibuprofen therapy for patients with systemic lupus erythematosus.

Drug Interactions

Coumarin-type anticoagulants - Several short-term controlled studies failed to show that ibuprofen significantly affected prothrombin times or a variety of other clotting factors when administered to individuals on coumarin-type anticoagulants. However, because bleeding has been reported when ibuprofen and other nonsteroidal anti-inflammatory agents have been administered to patients on coumarin-type anticoagulants, the physician should be cautious when administering ibuprofen to patients on anticoagulants.

A.S.A.: Animal studies show that A.S.A. given with nonsteroidal anti-inflammatory agents including ibuprofen yields a net decrease in anti-inflammatory activity with lowered blood levels of the non-A.S.A. drug. Single dose bioavailability studies in normal volunteers have failed to show an effect of A.S.A. on ibuprofen blood levels. Correlative clinical studies have not been done.

Adverse Reactions: The following adverse reactions have been noted in patients treated with ibuprofen:

Note: Reactions listed below under Causal Relationship Unknown are those which occurred under circumstances where a causal relationship could not be established. However, in these rarely reported events, the possibility of a relationship to ibuprofen cannot be excluded.

Gastrointestinal: The adverse reactions most frequently seen with ibuprofen therapy involve the gastrointestinal system.

Incidence 3 to 9%: nausea, epigastric pain, heartburn
Incidence 1 to 3%: diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the gastrointestinal tract (bloating or flatulence).

Incidence less than 1%: gastric or duodenal ulcer with bleeding and/or perforation, gastrointestinal hemorrhage, melena, hepatitis, jaundice, abnormal liver function (SGOT, serum bilirubin and alkaline phosphatase).

Central Nervous System

Incidence 3 to 9%: dizziness

Incidence 1 to 3%: headache, nervousness

Incidence less than 1%: depression, insomnia

Causal relationship unknown: paresthesias, hallucinations, dream abnormalities

Dermatologic:

Incidence 3 to 9%: rash (including maculopapular type)
Incidence 1 to 3%: pruritis

Incidence less than 1%: vesiculobullous eruptions, urticaria, erythema multiforme

Causal relationship unknown: alopecia, Stevens-Johnson syndrome.

Special Senses:

Incidence 1 to 3%: tinnitus

Incidence less than 1%: amblyopia (blurred and/or diminished vision, scotomata and/or changes in colour vision). Any patient with eye complaints during ibuprofen therapy should have an ophthalmologic examination (see PRECAUTIONS).

Causal relationship unknown: conjunctivitis, diplopia, optic neuritis.

Metabolic:

Incidence 1 to 3%: decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Hematologic:

Incidence less than 1%: leukopenia and decreases in hemoglobin and hematocrit

Causal relationship unknown: hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes (e.g. purpura, epistaxis, hematuria, menorrhagia)

Cardiovascular:

Incidence less than 1%: congestive heart failure in patients with marginal cardiac function, elevated blood pressure

Causal relationship unknown: arrhythmias (sinus tachycardia, sinus bradycardia, palpitations).

Allergic:

Incidence less than 1%: anaphylaxis (see CONTRAINDICATIONS).

Causal relationship unknown: fever, serum sickness, lupus erythematosus syndrome.

Endocrine:

Causal relationship unknown: gynecomastia, hypoglycemic reaction.

Renal:

Causal relationship unknown: decreased creatinine clearance, polyuria, azotemia

Symptoms and Treatment of Overdosage: A nineteen month old child weighing 12 kg ingested from 2800 to 4000 mg and presented with apnea, cyanosis and responded only to painful stimuli. Oxygen and parenteral fluids were given and at 12 hours she appeared completely recovered. Two other children (10 kg each) ingested 1200 mg of ibuprofen each and there were no signs of acute intoxication or late sequelae. A 19 year old male who had ingested 8000 mg of ibuprofen reported dizziness, and nystagmus was noted. He recovered with no reported sequelae after parenteral hydration and three days' bed rest.

In cases of acute overdosage, the stomach should be emptied by vomiting or lavage, though little drug will likely be recovered if more than an hour has elapsed since ingestion. Because the drug is acidic and is excreted in the urine, it is theoretically beneficial to administer alkali and induce diuresis.

Dosage and Administration: Rheumatoid arthritis and osteoarthritis: The initial daily dosage in adults is 1200 mg divided into 3 or 4 equal doses. Depending on the therapeutic response, the dose may be adjusted downward or upward. The daily dosage should not exceed 2400 mg.

Maintenance therapy, once maximum response is obtained, will range from 800 to 1200 mg per day.

Mild to moderate pain associated with inflammation, dysmenorrhea: 400 mg repeated as required every 4 to 6 hours. The daily dosage should not exceed 2400 mg.

Children: Due to the lack of clinical experience, ibuprofen is not indicated for use in children under 12 years of age.

Supplied: 200 mg (yellow), 300 mg (white), 400 mg (orange) sugar-coated tablets and 600 mg (peach) film-coated tablets in bottles of 100 and 1000.

Product monograph available on request.

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Saskatchewan Dental Plan Reviewed

Overwhelming support from parents of school children and attainment of what is believed to be the highest level of child dental care in North America has failed to dispel the misgivings voiced by the College of Dental Surgeons of Saskatchewan when the Saskatchewan Health Dental Plan was first set up back in 1974.

But despite those lingering doubts, Dr. G.H. Peacock, secretary-registrar-treasurer of the College of Dental Surgeons, said the group is generally supportive of recommendations contained in a performance review of the Health Plan prepared by Dr. D.W. Lewis, chairman of the Department of Community Dentistry at the University of Toronto.

Those recommendations range from a variety of "in-house" proposals aimed at improving the overall plan to a suggestion that a detailed sample oral health survey of Saskatchewan children and adolescents be undertaken periodically (perhaps every five years) using a small group of trained dental examiners.

The Saskatchewan government has recently moved to expand its dental plan beyond the former cutoff point at age 14 to include 14 and 15-year-olds. Continued expansion will eventually include all Saskatchewan young people up to the age of 18, raising what Dr. Peacock admits is "a cloud" over the dental fraternity through speculation that the provincial clinics may some day provide all dental services in the province.

He is optimistic, however, that increased involvement of dentists in the new adolescent program is a significant indication that the provincial government realizes there is a place for private practice.

Dr. Lewis' review of the program's formative years said a sample survey of 600 parents and guardians in 1978 to 1979 indicated that "despite some minor concerns, there was over-

whelming support for the plan, its organization and the dental nurse services."

However, Dr. Peacock said the College of Dental Surgeons of Saskatchewan remains concerned that "although the program is supposed to be of a highly-preventative nature, the planned introduction of fluoride in all community water supplies has not been carried out."

And he said the College continues to believe that parents should have freedom of choice, without financial barriers, to take children either to dental nurses or dentists. (Under the provincial program, children enrolled in the Saskatchewan Dental Plan receive basic dental treatment at no direct charge to the patients. If a child goes to a dentist in private practice, the cost must be paid by the parents unless he has been referred there by a provincial dental clinic.)

The Dental College is also sticking to its contention that dentists should assume a greater supervisory role over the plan. Dr. Peacock maintained that no treatment should be done by the dental nurses without a dentist on the premises — "not necessarily over the shoulder but on the premises." He stressed that the College has never opposed the use of dental nurses for treatment in the children's program.

Professor Lewis noted in his report that without a proper control group it is difficult to draw firm conclusions. But lower decay attack in permanent teeth with longer exposure to the Saskatchewan Health Dental Plan is suggested. The actual amount of decay reductions was, however, small — about 0.1 to 0.2 DMF teeth per year. The data did not permit any conclusions to be drawn about the effects on primary teeth.

The study determined that a very high proportion of all Saskatchewan children — 73 per cent in 1979 to 1980 — were receiving complete dental

care. It was concluded that when the number of children partially treated under the plan and those partially completely treated in private offices are added, the level of dental care utilization in Saskatchewan (which Dr. Lewis said, speculatively might reach 90 per cent) is probably higher than in any other large geographic area in North America.

The report determined that use of the plan by children in Saskatchewan is about 20 per cent higher than it is in the three other universal provincial children's denticare programs (Newfoundland, Nova Scotia and Quebec) which use the fee-for-service private practice system, and is equivalent to the use in the Prince Edward Island program which, like Saskatchewan, uses salaried dental personnel in school clinics.

Dr. Peacock, in his observations of the findings, cautioned that the Saskatchewan plan "may or may not work in other areas of Canada, depending upon their manpower situation and other factors" but conceded it has been quite successful in Saskatchewan.

Because of the program's success, however, Dr. Peacock said many of the graduate dentists now being turned out in the province are looking elsewhere — particularly Alberta and British Columbia — to set up their practices. There were 333 dentists in Saskatchewan in 1981 with about 28 per cent of them in private practice. The remainder either worked for the Health Dental Plan or were teaching at the College of Dentistry or on the teaching staff of the dental nursing and dental assistant program.

With the dental plan clinics handling the vast majority of children 15 years old and under, the new dentists see steadily decreasing requirements for new private practices.

"We would like to work out an agreement with the government

whereby we could provide services to children," Dr. Peacock pointed out in an interview. "Right now, the only services we provide to children are for those who choose to go to a dentist and pay for it or for those who are referred out of the plan because the treatment that is required is beyond the scope of the dental nurse."

The Lewis report said the overall enrolment in the dental plan by eligible children has been high, averaging 93 per cent after the initial start-up year. The proportion of those enrolled each year who have received complete care as defined by the plan is also high, averaging 76 per cent to 90 per cent after 1974 to 1975.

The report found that despite the large increase of nearly 3.9 times in

grand total costs (from \$2.14 million to \$8.31 million, unadjusted for inflation) between 1974 to 1975 and 1979 to 1980, the costs per enrolled child dropped dramatically from \$163.05 to \$68.

Comparison of the costs with those of Canada's four other universal children's denticare plans produced a conclusion that the Saskatchewan plan appears to be performing with better, or at least equal effectiveness at lower, or at least equal cost.

The College of Dental Surgeons has questioned the cost figure of \$68 per child on grounds that not all actual costs were included. The College argued that the total would be more realistic if the cost of clinic space and other items had been included.

CDA Retirement Savings Plan

Unit values of the Canadian Dental Association's Retirement Savings Plan stood as follows on January 31, 1982.

<i>Common Stock Fund</i>	\$50.8173
<i>Fixed Income Fund</i>	\$26.3203
<i>Guaranteed Fund</i>	\$22.2836
<i>Balanced Fund</i>	\$11.9208

Total assets (market value) of the plan were \$30,412,151.

The previous month's figures, as of December 31, 1982, stood as follows:

<i>Common Stock Fund</i>	\$52.7617
<i>Fixed Income Fund</i>	\$26.1207
<i>Guaranteed Fund</i>	\$22.0234
<i>Balanced Fund</i>	\$11.9036

Total assets (market value) of the plan were \$30,846,789.

For further information write to: Canadian Dental Service Plans Inc., 2 St. Clair Ave. E., Toronto, Ont. M4T 2W1 or call the central information services of CDSPI At 1-800-268-3792 (961-7117 in Metro Toronto).

Régime d'épargne-retraite de l'ADC

Les valeurs respectives du Régime d'épargne-retraite de l'Association Dentaire Canadienne étaient les suivantes au 31 janvier 1982.

<i>Fonds d'actions ordinaires</i>	\$50.8173
<i>Fonds à revenu fixe</i>	\$26.3203
<i>Fonds garanti</i>	\$22.2836
<i>Fonds de placement</i>	\$11.9208

L'avoir total (valeur marchande) du régime s'élevait à \$30,412,151.

Au 31 décembre 1982, les chiffres du mois précédent étaient les suivants:

Fonds d'actions

<i>ordinaires</i>	\$52.7617
<i>Fonds à revenu fixe</i>	\$26.1207
<i>Fonds garanti</i>	\$22.0234
<i>équilibré</i>	\$11.9036

L'avoir total (valeur marchande) du régime s'élevait à \$30,846,789.

Pour de plus amples renseignements, veuillez écrire à l'adresse suivante: Canadian Dental Service Plans Inc., 2 St. Clair Ave. E., Toronto, Ontario, M4T 2W1, ou appeler le service de renseignements du CDSPI en composant 1-800-268-3792 (961-7117 pour les résidents de Toronto).

Obituaries

BELL, J.W. Dr. Bell of Lakefield, Ontario was born in 1900 and graduated from the University of Toronto in 1922. He was a life member of the Canadian Dental Association.

CARNEY, John. Dr. Carney of Montreal, Quebec was born in 1903 and graduated from McGill University in 1927.

FISK, George V. Dr. Fisk, a life member and past president of the CDA, graduated in 1917. He was an orthodontist in Toronto for many years.

LOVERIDGE, William A., Oct. 11, 1981. Dr. Loveridge of Vancouver, British Columbia was born in 1890 and graduated from the University of Toronto in 1917. He practised dentistry in Vancouver.

MORTON, P.W., Oct. 20, 1980. Dr. Morton of Toronto graduated from the Royal College of Dental Surgeons, Toronto in 1923.

SCHADEK, William J., Dec. 11, 1981. Dr. Schadek of Lockport, Manitoba graduated from the University of Toronto in 1945 and practised dentistry in St. James for 25 years.

SHERIDAN, Charles Wesley, Dr. Sheridan of Ottawa, Ontario was born in 1896 and practised dentistry in Ottawa for 50 years.

STEPHENS, W.C.R., Dec. 13, 1981. Dr. Stephens of Scarborough was born in 1939 and graduated from the University of Toronto in 1965.

WATSON, Gilbert, Jan. 1, 1982. Dr. Watson, born in Toronto, graduated from the University of Toronto in 1940.

Survey of Health Insurance Benefits in Canada, 1980

The Canadian Life and Health Insurance Association (CLHIA) has published health insurance benefits survey results for 1980, keeping this valuable practice alive.

An annual survey of health insurance benefits in Canada was conducted within the membership of the Canadian Association of Accident and Sickness Insurers (CAASI) for the years 1969 to 1979 inclusive. This preserved the continuity of similar surveys undertaken during the 1950s and 1960s by the Canadian Life In-

surance Association (CLIA) and the Canadian Conference on Health Care.

That continuity remains unbroken with the publication of survey results for 1980 by the CLHIA which was formed on January 1, 1981, and amalgamated the membership of CAASI and CLIA.

Because the new Association includes a number of companies which provided health insurance coverages but had not reported to earlier surveys, caution must be exercised when

comparing 1980 results with those of previous studies. Patterns of growth reported in 1980 appear generally, however, to be consistent with results of prior years.

Total direct premiums written in 1980, by the 59 CLHIA member companies reporting, reached \$1,704.9 million, 89.5 per cent of which was for group insurance.

Benefit payments to insured persons by CLHIA members in 1980 totalled \$1,255.6 million. Dental bene-

Table No. 12 — Dental Insurance — Group
Canadian Life and Health Insurance Association
Survey of Health Insurance Benefits in Canada — 1980

Province	Contracts in Force	Number of Persons Covered		Direct Premiums Written	Direct Claims Paid
		Employees	Dependants		
Newfoundland	66	9,383	20,616	\$ 1,708,651	\$ 853,140
Prince Edward Island	20	2,560	5,156	366,083	177,505
Nova Scotia	232	30,359	55,288	5,655,204	2,553,929
New Brunswick	130	17,391	35,166	2,842,154	2,146,732
Quebec	1,695	270,305	449,585	38,064,252	29,762,540
Ontario	6,832	1,099,205	1,905,633	179,228,821	162,033,462
Manitoba	580	54,118	93,905	8,817,113	8,126,174
Saskatchewan	351	37,660	67,220	5,978,292	4,323,407
Alberta	3,052	240,073	420,932	43,270,891	37,402,069
British Columbia	3,625	231,993	368,998	51,713,895	51,935,386
Yukon and NWT	23	7,348	13,108	886,918	715,378
Unallotted by Province	1,050	1,089	1,809	2,912,109	2,190,140
Canada Totals	17,656	2,001,484	3,437,416	\$341,444,383	\$302,219,862

payments were 25.5 per cent of the total.

For the third consecutive year the survey asked member companies to report on health benefit plans for which they provided administrative services only (ASO). There has been some variation in the completeness of the reports, particularly regarding the number of employees and dependants covered, but the information regarding number of contracts and benefit payments is reasonably consistent from year to year.

The reporting of the number of employees and dependants covered under ASO contracts was more complete for 1980 than for previous years. Thus, while the available data doesn't yield trend information, the data for the numbers covered in 1980 may be of interest.

It appears that with double digit inflation and economic pressure, some employers are looking to self-insure in order to save the two per cent premium tax payable to government

as they feel that they will eventually have to pay the cost if the experience of the plan is negative. These same employers, however, are still looking to the expertise of the commercial carriers for claim administration services, assistance in financial analysis and the preparation of patient information booklets.

In a survey of dental plans conducted by a firm providing actuarial and management services in Ontario, namely, Tillin Ehasz, Nelson and Warren Inc., it was shown that of 20 companies using the "Cost Plus"/Self-Insured method that 19 used insurance companies for claims adjudication, none used in-house facilities and one used other methods. It is interesting to note that the main reasons for adopting the "Cost Plus"/Self-Insured basis were cost savings and the fact other benefits were funded the same way, reflecting greater confidence in the experience of the plans.

Clyde Covit, D.D.S.

ASO Business in Canada

	1978	1979	1980
Dental Contracts in Force	8	25	32
Benefit Payments (in thousands)	\$1,414	\$7,907	\$20,370
Number Covered — Employees			164,213*
— Dependents			272,956*

*One company did not report the number covered.

2th Biennial Conference planning underway



The Local Arrangements Committee for the 2th Biennial Conference on Canadian Dental Research and Education is pictured: standing from left to right Bruce Moxley, Holly Prest,

Dr. Doug Eisner, Kate MacDonald, Kaireen Vaison; seated Dr. Andrew MacKay, President, Dalhousie University, Dr. Doug Chaytor, Chairman, Local Arrangements Committee,

Dr. Ian Bennett, Dean, Faculty of Dentistry. Missing from the photo is Dr. Derek Jones. The conference will take place in Halifax from June 16 to 21.

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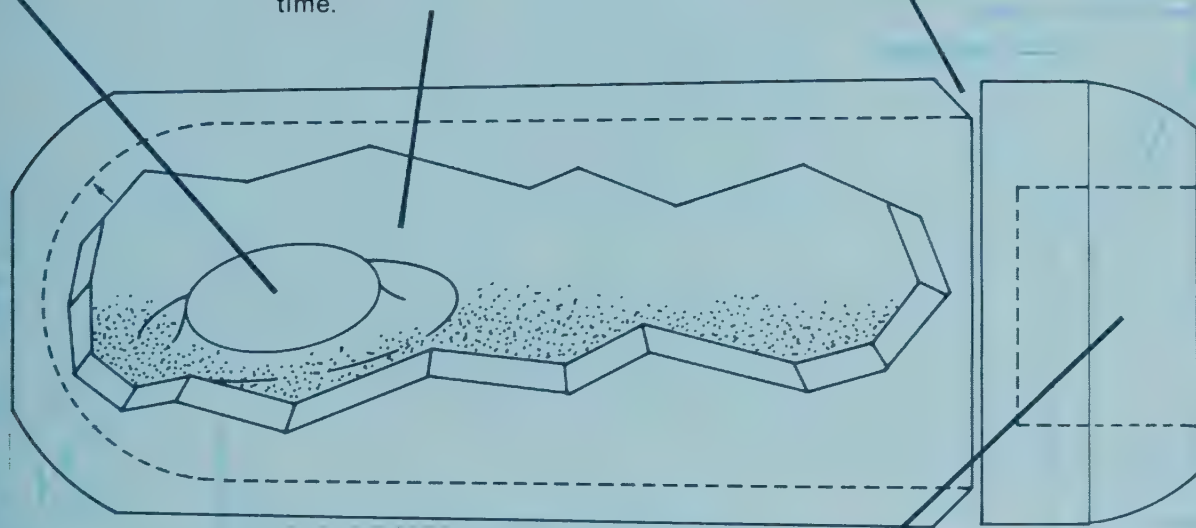
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Briefly — In the News

The cost for dental services programs in Quebec reached \$95,915,651 in 1980, an increase of 26.4 per cent over the previous year.

The dental program for children rose from \$62,711,447 in 1979 to \$76,152,447 in 1980, an increase of 21.4 per cent. This increase is a result of the extension of eligibility to children up to 15 years, increase in participation and increase in fees in September, 1980.

The social aid beneficiaries program represented approximately 17 per cent of the total cost of dental services in 1980. Between 1979 and 1980 the cost increased from \$10,058,320 to \$16,131,025. This economic growth is attributed primarily to the number of participants. Other factors for this increase are the majority of tariffs in September, 1980 and the rise in the services by participants. The oral surgery program has hardly been modified since it began. In 1980 the cost rose to \$13,453,585, which represents 3.6 per cent of the total cost of the dental services programs.

The Kingston and District Dental Society is promoting fitness and National Dental Health Month in a novel way.

Molar-thon '82 on Sunday, April 5 will "crown" the society's Dental Health Week from April 19 to 25.

Both children and adults are invited to participate. Organizers have scheduled two runs, with the one mile Fun Run for Children starting at 10:30 am. The five mile Road Race begins at 11 am.

While there is no charge for Fun Run participants, the entry fee in the Road Race is \$5 per person or \$10 a family in advance, and \$6 each or \$12 per family on race day. Registration takes place at the St. Lawrence Col-

lege Gymnasium, Kingston between 8:30 and 10:30 am.

There are 11 categories for males and females 15 years of age and under, 16 to 19, 20 to 29, 30 to 39, 40 to 49 (male), 40 and over (female) and 50 and over (male). Trophies will be awarded to the overall male and female winners, and the first three in each category will receive medals.

For information contact Deborah Steacy at (613) 542-1164 after 8 pm, or Molar-thon '82, P.O. Box 561, Kingston, Ontario K7L 4W5.

The Kidney Foundation of Canada reports that dentists should treat all dialysis patients as though they have hepatitis. This means the dentist must wear protective clothing, sterilize instruments, take special precautions with x-ray film, and stress good personal hygiene to staff. Copies of "The Dialysis Patient: An Informative Guide for the Dentist" are available at the Foundation's head office, 1650 boul. de Maisonneuve ouest, Suite 400, Montréal, Québec H3H 2P3.

The new Insurance Planning Guide for Dentistry Graduates, published by the Canadian Dental Service Plans Inc., will assist the graduate in planning his insurance program.

The booklet takes some of the mystery out of insurance. It covers what risks should be covered, how much insurance you should get, how to find the right policy for your needs at the lowest possible cost, and where to go for advice.

The guide, which is available free-of-charge through CDSPI by calling the toll-free number 1-800-268-3792, has been forwarded to all 1982 Canadian dental graduates. An application for the no-cost graduate insurance package is available with the brochure.

Applications are now being accepted for CFDE fellowships.

The Canadian Fund for Dental Education is offering a fellowship for an existent university dental teacher for staff with a minimum of five years teaching experience. The award, sponsored by Warner-Lambert Canada Inc., is valued at \$2,000.

A number of fellowships will be awarded to applicants preparing for a teaching and/or research career in a Canadian school of dentistry or dental hygiene.

More information on these fellowships can be obtained from the office of the Dean in each dental school or the CFDE at Suite 205, 44 Eglinton Avenue West, Toronto, Ontario M4R 1A1. The names of the recipients will be announced in May.

Twice as many children as senior citizens see a dentist once every two years, a United States government study found.

The National Center for Health Statistics reported that only 40 per cent of elderly persons said they had seen a dentist in the two years preceding the health survey.

The report, released late last year, also cited dental caries and periodontal disease as two major contributors to poor oral health. Half the population aged 65 to 74 no longer have any teeth.

People will still have to visit a dentist when and if a tooth-decay vaccine is produced.

President-elect of the American Academy of the History of Dentistry, Dr. Clifton Dummett, said that while such a vaccine is imminent (see J Canad Dent Assn No 2 1982), people will go on needing dentists. "No foreseeable laboratory breakthroughs can

In the News

eliminate all the many causes of decay and other oral disease," he said.

Dr. Dummett concluded that the dentist's role may expand considerably to the point where dentists will be engaged in the prevention, diagnosis and treatment of all oral disorders. These dentists will perceive the patient holistically, "with a view toward the health of the whole body."

Secretary of State Gerald Regan tabled a status report recently in the House of Commons.

The report outlines the federal government's response to implementing recommendations of the Obstacle Report which identified problems faced by the handicapped. Regan also intends to present to the House an

action plan on the other federal government initiatives.

The Canadian Dental Association made a statement to the federal government's Special Committee on the Disabled and Handicapped, outlining the specialized dental needs required by some handicapped individuals. The CDA suggested a national committee be established to recommend solutions that will provide equity and access of care for the handicapped and disabled.

The Toronto Academy of Dentistry has contributed \$5,000 to the Canadian Fund for Dental Education. The fund is dedicated to promoting good dental health by providing financial

assistance for dental education and research.

Dr. Joe Edelson is president of the Canadian Academy of Endodontics. Other members of the executive are Dr. Bruce Burns, past president, Dr. Michael Sherman, president-elect, Dr. Marshall Peikoff, treasurer, and Dr. John Phillips, secretary.

Dr. G.B. White is the new president of the College of Dental Surgeons of Saskatchewan for 1982. Also on the new executive are Dr. B.E. White, vice-president, Dr. G.H. Peacock, secretary-registrar-treasurer, and Dr. J.W. Niedermayer, Board of Governors representative.

International College of Dentists



At the annual meeting of the International College of Dentists, held in conjunction with the C.D.A. Convention in Calgary, Dr. D.E. Williams, President of the Canadian Dental Association, was among those honoured by induction into the College. Also selected for this recognition was Mr. Murray McDonald be-

cause of his many years of dedication and service to the dental profession. The Canadian section was also honoured by the presence of Dr. Joseph Tamari of Beirut, Lebanon, International President. Seated, left to right, B.P. Martinello, A.R. TenCate, D.M. McDonald, J.W. Tamari, (International President), W.K.

Martin, (President Canadian Section), H. Smart, M. Shevell; standing, left to right, D.J. Williams, E.G. Jarjour, F.G. Sonley, M.L. Lucyk, G.H. Peacock, W.R. Patrick, D.H. Skinner, S.A. Heschuk, R.O. Green, P.Y. Lamarche, S.R. Gelmon.

Dental Research in Canada

The International Association for Dental Research exists to promote research in all aspects of dentistry and currently has a worldwide membership of over 5,500.

Although the Canadian Association for Dental Research, a division of the IADR, has only 150 members, several have received awards from the IADR for the high quality of their research and two have recently have been elected to the presidency of IADR, namely Dr. G.S. Beagrie of Vancouver (1977 to 78) and Dr. A.H. Melcher of Toronto (1982 to 83). This is good evidence of the high regard with which dental research in Canada is held internationally.

Virtually all dental research in Canada is carried out by academic staff in the 10 Faculties of Dentistry and there are no special dental research institutes, comparable to those in the United States.

A recent survey carried out for 1980 to 81 by the Association of Canadian Faculties of Dentistry revealed that no less than 95 different research projects in the dental faculties were being funded by outside agencies. Many other projects were being funded either by the universities themselves or from the \$15,000 per year made available by the Medical Research Council for distribution by each dental dean.

The types of projects under investigation are extremely diverse. They range from studies on halitosis on the west coast to dental materials on the east coast, and in between nearly every aspect of dental disease is being studied. Most of the research is of a basic nature and it is unfortunate that there are so few clinical projects in progress. It is also regrettable that the schools of Dental Hygiene do not appear to be involved in research to any extent.

Canada is particularly strong in at least three areas of dental research.

One of these is periodontology where the major focus of activity is the group in Periodontal Physiology at the University of Toronto under the leadership of Dr. A.H. Melcher. This is the only dental group among the nine special research groups funded by the Medical Research Council and is composed of five academic staff who work full time on research together with a number of technicians, post-doctoral fellows and graduate students.

The group has been particularly active in studying the structure and turnover of collagen in the periodontal ligament, the factors regulating alveolar bone remodelling and the cells involved in development of the periodontal ligament. Their work should have important implications for the treatment of periodontal disease.

Another area of internationally recognized expertise is that of oral microbiology where exciting work is currently being carried out, particularly at the Universities of Manitoba, Toronto, Laval and British Columbia in relation to the development and metabolic activity of dental plaque and the general microbial ecology of the oral cavity. These studies should have an impact on all plaque-related diseases such as caries, periodontal disease and halitosis.

The third notable area is that of the neuro-physiology of mastication and swallowing which is particularly strong at the Universities of Montreal, Toronto and British Columbia. These studies are furthering our understanding of temporomandibular joint disorders and various orthodontic problems.

Other major research projects relate to studies on oral connective tissues, craniofacial development, sali-

va, dental materials, tooth formation and the epidemiology of dental disease.

Dental research worldwide has been especially effective in developing ways of combatting the main dental disease, namely dental caries. The use of fluorides in various forms has been the most important factor and Canada has played a role in various studies of fluoridation.

The success of this aspect of dental research is reflected in the decreasing prevalence of dental caries. General practitioners in the future will probably be able to concentrate more on periodontal disease in their patients and spend more time on procedures presently performed only by specialists.

The total funding for dental research in Canada in 1980 to 81 was about \$3.1 million of which 57 per cent was derived from the Medical Research Council.

The MRC has responsibilities for funding research in dentistry, medicine and pharmacy. It awards direct research grants to investigators in universities and also funds a variety of research training programs.

The research grants are awarded after a peer review process and most applications from dental schools are examined by the Dental Sciences committee of MRC. Made up of selected researchers from across the country, this committee is one of the 21 which cover all aspects of health research.

The committees meet once a year and after consideration of external referee reports, rate all research applications for scientific merit and recommend a budget. After screening by the grants committees the application ratings of the grants in all fields are pooled. Therefore dental applications compete directly with all the others and are funded in order of rat-

ing until the available money is exhausted. It will come as no surprise that the latter always happens before all meritorious applications have been funded.

During the very recent past, a number of the provinces have set up separate health research funds and these have made very important contributions to dental research in British Columbia, Ontario and Quebec.

The Alberta Heritage Fund should, in the future, make a significant contribution to dental research in Alberta and lesser contributions may be expected from the much smaller provincial funds in Saskatchewan and Manitoba. At present, the Faculty of Dentistry at Dalhousie is the only one without access to a Provincial Health Research Fund.

There is a continuing need for further basic science studies of all aspects of dental disease. For instance, development of a better tooth sealant, more retentive than existing ones and applicable to approximal areas of the teeth would, by itself, revolutionize the treatment of caries. Similarly, development of an anti-calculus agent would greatly affect the work of dental hygienists.

These types of basic studies should and probably will continue to receive some support from established sources. However, it is difficult to envisage a great increase in the funds available for basic research.

In the past, dentistry has been excessively reliant on the Medical Research Council for funding and it is gratifying that alternative sources are now being developed. However, the MRC will continue to play a much greater role in the funding of dental research than it does in the funding of medical research. Since few people actually die from dental problems, there are no sources of funding equivalent to the foundations for heart re-

search, diabetes, cystic fibrosis, etc., which play such a big role in the funding of medical research.

Thus for expansion of dental research it will be necessary to seek out alternative sources of funding. Public health dentistry is one relatively neglected area of research for which funding does appear to be available from such agencies as the federal Department of National Health and Welfare.

Funds are available for such purposes as tests of the cost/effectiveness of the different procedures used in preventive dentistry and the most effective ways to ensure use of oral health procedures by the general public. Although there is both a Canadian and a worldwide shortage of clinical investigators to carry out such studies they are of enormous economic importance and the universities should begin to train more of this type of investigator. This lack of clinical investigators is also partly responsible for the slow rate of transfer from the laboratory to the general practitioner of the results of basic research on such things as the remineralization of early carious lesions.

It is only recently and to a very limited extent, that dentistry has begun to concern itself with the oral health needs of groups in society with other special health problems such as cystic fibrosis, diabetes and physical and mental handicaps. Many special agencies support research on these conditions and there would seem to be great opportunities for obtaining funds for research on the oral health needs of people with these other medical problems.

Excellent research training opportunities exist for dentists wishing to make a career of teaching and research. Several universities in Canada offer well-established programs for training in dental research to the

M.Sc. or Ph.D. level. The University of Manitoba, for instance, was the first in the world to offer a Ph.D. program in Oral Biology.

These studies can often be combined with the specialty training programs advertised regularly in the Canadian Dental Journal and such a combined Ph.D. and specialty program would last about five years. Financial support is available from agencies such as the Medical Research Council. The stipend for 1982/83 for an MRC Fellow varied from \$20,000 to \$32,000 per annum depending on the number of years post DDS/DMD. The MRC also supports a special dental research training grant to the University of Toronto for a combined program of basic science and clinical specialty training and two new students can be accommodated each year.

The Canadian Fund for Dental Education has also played an important role in the training of academic staff for the dental schools and currently has a particular interest in support of studies on dental manpower requirements.

One of the major problems facing dental research is the difficulty of attracting dentists for research training because of the higher financial rewards immediately available in dental practice. Many students are in debt after completion of dental school and the financial rewards of practice are almost irresistible at that time.

Only about two per cent of dental graduates apply for research training fellowships within four years of graduation as compared with six per cent of medical graduates. In fact in 1970 to 80 there are fewer clinician/scientists in dentistry than in 1970.

The total number of dental researchers has increased slightly in recent years, mainly because basic scientists with Ph.D. degrees have been

attracted into the field. However, the increasing perception that the urban areas of Canada have a sufficiency of general practitioners, at least for the needs of those members of the public who regularly seek treatment, may change the situation for the better and encourage the best young dentists to consider an academic career.

Because of the financial constraints in the dental schools, another major problem is that many academic clinicians are overburdened with teaching duties. This often happens quite early in their careers before they have had an opportunity to establish a viable research program.

Dental clinicians in general appear to have heavier teaching responsibilities than their medical counterparts and this is a problem that requires attention by the universities. The latest figures show that only 9.2 per cent of dental clinicians hold a research grant

as opposed to 35.6 per cent of clinical faculty in medicine. Thus there is a great need for the provision of research professorships, particularly for young clinician/scientists, who could then devote most of their efforts to research.

Another factor inhibiting recent graduates from taking research and specialty training is the lack of residencies in clinical areas other than oral surgery. Although some fellowships are available for research training, none are available for specialty training and dental graduates must often be prepared to finance the specialty component of their training themselves.

Unlike the situation in medicine, dental school clinics are part of the university and all fees paid by patients revert to the university. Consequently dentistry enjoys no "earning pool" for financial support of the clin-

ical trainee comparable to that in hospitals.

In summary, dental research in Canada is generally of a high standard in the basic sciences but is relatively weak clinically and, for many reasons, there is an acute shortage of clinical investigators.

However, research funding is growing slowly and has excellent potential for further expansion, especially for clinical research. Good research training facilities are available in several universities and, despite the necessity for grant applications, entry into dental research and teaching can provide a most challenging and interesting career for both dentists and basic scientists.

This material was prepared by Dr. C. Dawes, Professor of Oral Biology, Faculty of Dentistry, University of Manitoba.

Health Care Organizations' Presidents Honoured



The Minister of Health of New Brunswick Brenda Robertson held a reception recently to honour the presidents of four national health care organizations. All reside in the greater

Moncton area. From the left: Dr. Donald Williams, president, Canadian Dental Association; Dr. Hervé Landry, past-president, Canadian Optometrical Association; Mrs. Robertson;

Aldor LeBlanc, president, Canadian Long Term Care Association; Dr. Léon Richard, president, Canadian Medical Association and Premier Richard Hatfield of New Brunswick.

Dentistry Demo Science Centre



Tiina Jarvalt, Ontario Science Centre Botanist, demonstrates the correct way to brush teeth. This is part of a new and ongoing Dentistry Demonstration. The demo is held in the Hall of Life on weekends and everyday in July and August.

Oral hygiene is not a popular subject with school children.

But the dental profession has lately been receiving some help in getting the message across.

The Ontario Science Centre launched a new dentistry demonstration in mid-November. Aimed at the thousands of school children — and adults — who visit the science centre every year, the 20-minute “demo” places a strong emphasis on preventive dentistry.

Tiina Jarvalt, who together with Earl Sweeney, acts as a biology instructor for the demo, says most of the information is straightforward. There is no attempt to diagnose or treat.

Instead, the instructors follow the science centre’s unique approach to communication: visitors are encouraged to learn by participating. Volunteers can sample disclosing tablets, floss their teeth, and even examine bacteria from their mouths underneath a microscope.

Sweeney says the science centre is counting on the demo being popular. Another dentistry demo held on a trial basis three summers ago drew an average of 30 people a day.

Conceived by a Toronto public health dental hygienist, the new demo will be a permanent feature of the science centre’s Hall of Life. It joins other medical displays which instruct visitors on a variety of subjects — ranging from the reproductive system to the medical application of a laser beam.

When it comes to dentistry, both Sweeney and Jarvalt are finding a lot of people take their teeth for granted. Many don’t even know how many teeth they should have.

“I get answers anywhere from 10 to 50,” says Jarvalt. “Many people also think that as they get older, they lose their teeth as a matter of course. By the time they receive their pension cheque, some people assume they will be toothless.”

Fielding questions from the demo’s audience is an integral part of the instructors’ responsibilities. Sweeney and Jarvalt plan to rely on the dental profession to help them with the answers.

Although they spent two months collecting dental models, pamphlets, brochures and resource material in preparation for the demo, the instructors know they will need current information on new developments in dentistry. Eventually they hope to

have a dental resource group they can depend on to keep them informed.

In the meantime, Sweeney and Jarvalt respond with a simple, “Ask your family dentist,” when it comes to questions they don’t have the answer for. And Jarvalt says she hopes more people take their advice.

“A lot of people are not asking their dentists about their dental problems,” she says. “They are simply not aware of health problems relating to dental disease.”

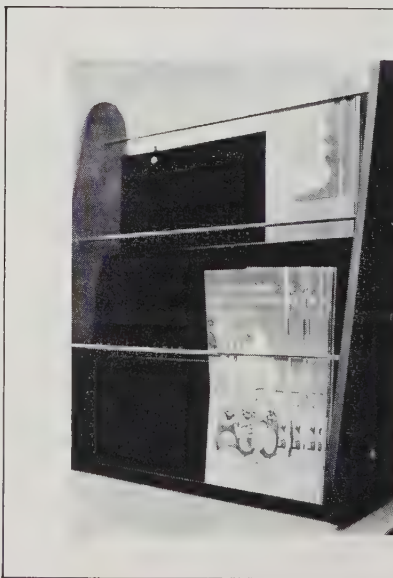
The instructors stick to the basics. They show the audience models of primary and secondary teeth. They explain what plaque is and why proper flossing and brushing is such a necessity. And when they can, they distribute free samples of sugarless gum, denture cleansers and toothbrushes donated by members of the dental industry.

Other topics touched on by Sweeney and Jarvalt include the benefits of good nutrition and diet, how to protect the mouth by wearing Canadian Standards Association-approved mouthguards, and how to correctly read the label of a food package to know exactly how much sugar it contains.

By sponsoring a permanent dentistry demo, the science centre hopes to improve the public’s knowledge about dental disease.

Sweeney and Jarvalt know prevention is the answer. They want their audience to know it too.

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With all the new pamphlets available from the Canadian Dental Association, why not buy a pamphlet rack too. For just \$17.95 including taxes and shipping charges; CDA will send you a three-shelf rack. Just contact the Canadian Dental Association, Communications Department, 1815 Alta Vista Drive, Ottawa, Ontario, K1G 3Y6.



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Electronically automated muscle relaxation followed by registration of mandibular position achieves three-dimensional correction of the skeletal malrelation, often instantaneously altering the basic orthodontic classification. For example, a significant increase in vertical dimension changes a seeming Class III to a realistic Class I. Methods and appliances for orthodontically increasing vertical dimension are greatly expanding the functional scope of orthodontic treatment, with a marked increase in adult orthodontics. The functional objective of the application of biomedical electronics to orthodontic diagnosis and treatment is the establishment of a relaxed neuromuscular environment for the finished case.

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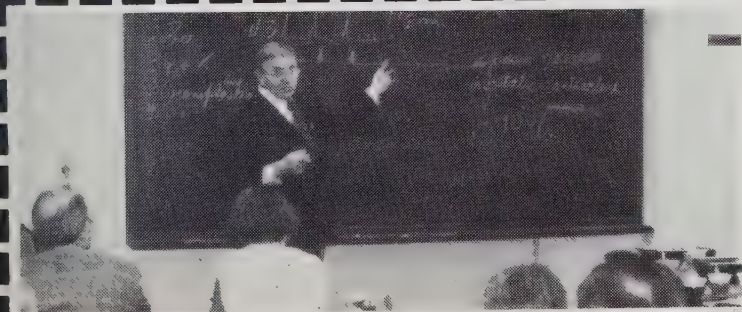
Philadelphia, PA	Feb. 4-5-6
San Diego, CA	Feb. 12-13-14
New Orleans, LA	March 12-13
Boston, MA	March 11-12-13
Houston, TX	March 18-19-20
Denver, CO	March 25-26-27
Pittsburgh, PA	April 1-2-3
San Francisco, CA	April 16-17-18
University of West Virginia,	
Morgantown, WV	April 30-May 1-2
Knoxville, TN	May 6-7-8
Washington, DC	May 13-14-15
Indianapolis, IN	May 13-14-15
Ottawa, CAN	May 20-21-22
Portland, OR	June 10-11-12
Las Vegas, NV	June 11-12-13
Edmonton, CAN	June 17-18-19
Montreal, CAN	June 17-18-19
Monterey, CA	July 16-17-18
Regina, CAN	Sept. 2-3-4
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Atlanta, GA	Sept. 23-24-25
U.C.L.A., Los Angeles, CA	Sept. 24-25-26
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June 9-13, 1982

National Dental Health Month



International Year of Disabled Persons, 1981, has drawn to a close and we are now into 1982, a year the United Nations has designated for the World Assembly on Concerns for the Elderly. The two concepts are drawn together as National Dental Health Month chairman Dr. Michel Carvonis inspects nine-year-old Ernie McLaurin's teeth while Kathleen Garrioch looks on.

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In conjunction with the F.D.I. International Conference, Vienna 10-16 October, 1982, **Allan's Travel Service** will offer two (2) packages which can be taken individually or together.

The first, **Tour "A"** is a ten (10) day visit to EASTERN EUROPE. Warsaw, Wroclaw, Prague and Budapest will be visited from October 1st to October 10th, when this tour will end in VIENNA. CA \$1090.00 per person, double occupancy; single supplement CA \$189.00.

Tour "B" starting with a flight from Vienna to Athens. A city tour on day one. The second day you will start a four (4) day classical/Byzantine tour of Greece taking you to Old Corinth, Mycenae, Nauplia, Epidauros, Olympia, Delphi and St. Luke. Return to Athens on day five (5). On the next day, you will start a four (4) day cruise in the Aegean Sea visiting Mykonos, Santorini, Heraklion, Rhodes, Kusadasi, Patmos. Return to Athens on day nine (9) and final departure on day ten (10). Total nine (9) nights ten (10) days. CA \$1240.00 per person double occupancy, single supplement CA \$545.00.

Dans le cadre de la Conférence Internationale de la F.D.I. — Vienna 10-16 octobre 1982, **Allan's Travel Service** vous offre deux voyages organisés: le tour "A" (du 1er au 10 octobre) et le tour "B" (du 17 au 26 octobre). Vous pourrez vous joindre à l'un ou l'autre de ces tours ou encore, si vous le désirez, aux deux.

Le tour "A" consiste en un visite d'une durée de 10 jours de l'Europe de l'Est. Ce tour vous conduira à Varsovie, Wroclaw, Prague et Budapest et vous ramènera à Vienne. Le coût de \$1090.00 CAD par personne (sur la base de deux personnes par chambre), supplément de \$189.00 CAD.

Le tour "B" vous amènera, après la Conférence, par avion à Athènes. Dès la première journée à Athènes, tour de ville. Le lendemain, départ pour une visite de 4 jours de la Grèce classique. Vous verrez l'ancienne Corinthe, Mycènes, Nauplie, Epidaure, Olympie, Delphes et Saint-Luc. Le cinquième jour, retour à Athènes. Le jour suivant, départ pour une croisière de quatre jours sur la mer Egée au cours de laquelle vous visiterez Mikonos, Santorini, Héraklion (Crête), Rhodes, Kindasi et Patmos. Le neuvième jour, retour à Athènes. Le dixième de \$1240.00 CAD par personne (sur la base de deux personnes par chambre), supplément de \$545.00 CAD pour chambre simple.

Example of air transportation cost:

TO VIENNA FOR CONFERENCE ONLY	
From: Ottawa & Toronto	\$931.00
Montreal	\$847.00
Vancouver	\$1142.00
FOR TOUR "A" (EASTERN EUROPE)	
From: Ottawa & Toronto	\$908.00
Montreal	\$819.00
Vancouver	\$1116.00
FOR TOUR "B" (ATHENS)	
From: Ottawa & Toronto	\$1069.00
Montreal	\$985.00
Vancouver	\$1670.00
FOR TAKING BOTH TOURS "A" & "B"	
From: Ottawa & Toronto	\$1395.00
Montreal	\$1275.00
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Prix suggérés pour le transport aérien:

VIENNE POUR LA CONFERENCE SEULEMENT	
De: Ottawa & Toronto	\$931.00
Montreal	\$847.00
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TOUR "A" (EUROPE DE L'EST)	
De: Ottawa & Toronto	\$908.00
Montreal	\$819.00
Vancouver	\$1116.00
TOUR "B" (ATHENS)	
De: Ottawa & Toronto	\$1069.00
Montreal	\$985.00
Vancouver	\$1670.00
TOURS "A" & "B"	
De: Ottawa & Toronto	\$1395.00
Montreal	\$1275.00
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*** Start planning now for the 71st Annual World Dental Congress Tokyo 14th to 20th November 1983 and the possibility of a two (2) week pre-convention tour of the People's Republic of China and/or a post convention tour of the Orient.

** Penser dès maintenant au 71ème Congrès F.D.I. qui aura lieu à Tokyo du 15 au 20 nov. 1983 et à la possibilité d'un tour pré-congrès de 2 semaines dans la République Populaire De Chine ou d'un tour post-congrès de l'Orient.

Continuing Education

Sponsoring Institution/Address	Location of Course	Title of Course	Subject Area	Date	Style	Instructor(s)	Registration	Fee	Audience	Contact Person/Telephone
Dalhousie University, Continuing Education in Dentistry, Halifax N.S. B3H 3J5	Halifax, Nova Scotia	TMJ Dysfunction	Prosthodontics (fixed-removable)	March 26, 1982	Lecture	Dr. George Zarb	open	\$100	general practitioners, specialists, assistants, hygienists, other	Kaaren Vaison (902) 424-2248
"	"	Cleft Palate		March 27, 1982						"
"	Heather Motel, New Glasgow, Nova Scotia	Orthodontics		April 2 & 3 1982		Dr. Wayne Barro				"
"	Hotel Beausejour, Moncton, New Brunswick	The Dental Office & Dental Lifestyles		April 23 & 24, 1982		Dr. Wally Mealica				"
"	Halifax Nova Scotia	Post College Assembly '82	Operative Dentistry	May 9-11 1982	Lecture	Drs. Tom Berry & Harold Laswell	open		general practitioners, assistants, hygienists, other.	"
"	"	XII Biennial Conference on Canadian Dental Research & Education		June 16-21, 1982						"
"	"	Controversies in Dentistry	General Dentistry	June 18 & 19, 1982	Lecture		open		general practitioners, specialists, assistants, hygienists	"
"	"	Issues in Dentistry	Practice Management	June 18 & 19, 1982	Lecture		open		general practitioners, assistants, hygienists.	"

Northeast Dental Seminars



presents

**Harold Gelb, DMD,
Sally I. Gelb, BA,
Samuel Bursuk, ND**

**The Diagnosis and
Treatment of TMJ
Dysfunction,
Myofunctional
Therapy
and
Bio-nutritional Analysis
as Applied to Dental
Practice**

**Toronto: April 24 and 25
Halifax: May 7 and 8*
San Francisco: May 15 and 16**

*Bursuk will not be present.

A world renowned lecturer and temporomandibular joint specialist, Dr. Gelb will present a holistic approach to TMJ dysfunction with the help of his myofunctional therapist, Mrs. Gelb, and nutritional consultant, Dr. Bursuk. In addition to benefiting from the research and clinical experience presented, dental professionals will have the opportunity to gain "hands-on" experience and expertise. Mrs. Gelb will discuss the diagnosis and treatment of patients with traumatic swallowing problems; Dr. Bursuk will show how the use of such physiological analyses as the SMA 24 blood chemistry profile can help dental professionals better manage such conditions as periodontal disease, tooth sensitivity, herpes simplex and bruxism.

Cost: \$350 (auxiliaries half-price)

**Participation is limited so please call
603/329-6117 immediately for more
information.**

CDA Resource Centre/Le Centre de documentation

Medline

The **MEDLINE** search service is now in place at the CDA library.

This computerized information retrieval service, which provides citations to nearly 500 dental and related journals from around the world, is being offered on an experimental basis, with a limited number of **FREE** searches extended to each user. The system's main advantages are speed, currency and comprehensive coverage.

Whether you are carrying out in-depth research, or need a bibliography printed on any dental or medical topic, **MEDLINE** is the data base to try. For more information contact the librarian.

Whole issues of periodicals cannot be borrowed, but xerox copies of articles are available to all members at no charge. If the requested title is not housed here, a copy of it

will be ordered for the user on interlibrary loan. Please address your inquiries to the librarian, Canadian Dental Association Library, 1815 Alta Vista Drive, Ottawa Ontario K1G 3Y6 (613-523-1770).

Borrowing Terms

The library/resource centre of the CDA is open daily from 8:30 am to 4:30 pm except Saturdays and Sundays. Books and periodicals may be borrowed by members by writing or calling the librarian at the Canadian Dental Association Library, 1815 Alta Vista Drive, Ottawa Ontario K1G 3Y6 (613-523-1770).

Books are loaned under the following terms: the borrowed book may be retained for a two-week period from the date received by the borrower; renewal for a further two-week-period is possible provided the book is not requested by another user; postage for this service is paid by the Association.

Periodicals/Périodiques

American Journal of Orthodontics
British Dental Journal
Canadian Dental Hygienist
Canadian Forces Dental Services
Bulletin
Canadian Journal of Public Health
Dental Abstracts
Dental Assistant
Dental Economics
Dental Hygiene

Dental Management
Dental Survey
General Dentistry
International Dental Journal
Journal Dentaire du Québec
Journal of the American Dental
Association
Journal of Clinical Orthodontics
Journal of Clinical Periodontology
Journal of Dental Education
Journal of Dental Research
Journal of Endodontics

Journal of Hospital Dental Practice
Journal of Oral Surgery
Journal of Periodontology
Journal of Prosthetic Dentistry
Journal of Public Health Dentistry
Le Chirurgien dentiste de France
Ontario Dentist
Ontario Medical Review
Oral Health
Oral Surgery, Oral Medicine, Oral
Pathology
Revue d'odonto stomatologie

Medline

Le Centre de documentation de l'ADC dispose maintenant d'un service de recherche documentaire automatisée appelé **MEDLINE**.

Ce service automatisé peut fournir des renseignements sur près de 500 journaux dentaires ou de disciplines connexes paraissant dans le monde entier et il est offert à titre d'essai. Le nombre des demandes **GRATUITES** est cependant limité. Le système est rapide, couvre toutes les publications dentaires actuelles et présente des renseignements complets.

Si vous faites des recherches approfondies ou avez besoin d'une bibliographie sur un sujet dentaire ou médical particulier, consultez le service **MEDLINE**. Pour de plus amples renseignements, veuillez communiquer avec la bibliothécaire de l'ADC.

Il n'est pas permis d'emprunter des numéros complets de périodique, mais les membres de l'ADC peuvent obtenir gratuitement des photocopies des articles qui les

intéressent. Si la bibliothèque ne dispose pas du titre demandé, elle veillera à l'emprunter d'une autre bibliothèque. Veuillez adresser vos demandes à la bibliothécaire de l'Association dentaire canadienne, au 1815 promenade Alta Vista, Ottawa (Ontario) K1G 3Y6. Telephone: (613) 523 1770.

Prêts bibliothécaires

La bibliothèque de l'Association dentaire canadienne est ouverte tous les jours, excepté le samedi et le dimanche de 8h 30 à 16h 30 à tous les membres. On peut emprunter des volumes et des revues dentaires en écrivant ou en appelant à la bibliothécaire de l'Association dentaire canadienne, au 1815, promenade Alta Vista, Ottawa (Ontario) K1G 3Y6 (613-523-1770).

Conditions d'emprunt: les volumes peuvent être empruntés pour une période de quatorze jours; un renouvellement de deux semaines est accordé, pourvu que dans l'intervalle aucune demande n'ait été faite pour les mêmes volumes; l'Association assume les frais de port.

Fun Run Kicks off Activities

A full slate of activities has been lined up for visitors to the joint CDA/ODA Convention at Toronto's Sheraton Centre from May 9 to 12.

Convention organizers have planned a variety of events over and above the usual lectures, table clinics and demonstrations. Highlights include the traditional family run, a buffet and dance on opening day, a performance by Peter Appleyard and Second City Revue, and several class reunions.

The Cross-Canada 10 km Classic Family Run on Sunday, May 9, at 11 am at Toronto Island kicks off the convention. Dr. Walter Misek, run organizer, estimates about 200 people will be participating in the annual run, which Dr. Roger Ellis originated in 1979.

"It's become quite an established part of the convention (and) it's a nice little promotion for fitness," Dr. Misek said.

Details on the run have not been finalized to date, but Dr. Misek said participants must arrive by 10:30 am. Categories include open men's and ladies', 60 years and up, 50 to 59, 40 to 49, girls and boys 16 and under. Winners of these categories and male and female runners with the best overall times will receive trophies at the dinner-dance that same evening.

Those who wish to participate may register in advance by April 15 at a cost of \$8 per person or \$16 for family, or at arrival for \$10/person and \$20/family.

The Sunday evening buffet starts with cocktails at 6 pm followed by the buffet at 7 pm and dancing to the Generations. Organizers advise those planning to attend to purchase tickets in advance as space is limited.

A complimentary breakfast is offered Monday from 7:30-9 am prior to the clinical programs. That evening, participants will be able to catch the dinner-theatre featuring a perform-

ance by Second City Revue. The evening begins at 7 pm with music by Peter Appleyard.

Fun Nite on Tuesday is an informal affair starting at 8 pm with dancing to the Nova Sounds.

Two luncheons are being offered at the convention with the CDA luncheon on Monday. The ODA's incoming president, Dr. D.B. Smith of Belleville, will be installed at their Tuesday luncheon.

In addition to the social program, the ladies' committee has planned a program featuring a lecture Monday morning by Dr. Hamilton Hall, the "back" doctor. This is followed by a fur fashion show and luncheon at 1:30 pm at the CN Tower. Also on the agenda is a demonstration by Mr. C.R. Porter of Josiah Wedgewood at 2 pm Tuesday, followed by a wine and cheese party. The farewell champagne breakfast Wednesday morning brings

the ladies' program to a grand finale.

Visitors, when not busy taking in the clinical and social programs, will have an opportunity to visit the commercial exhibits areas as well as convention-related meetings.

You may order your tickets for the social functions when you register in advance. Organizers ask that you complete the registration and ticket form included in the convention package sent you. No tickets will be sent by mail, but pre-ordered tickets will be available in individual envelopes, marked to your attention, at the advance registration desk on the Lower Mezzanine Floor of The Sheraton Centre.

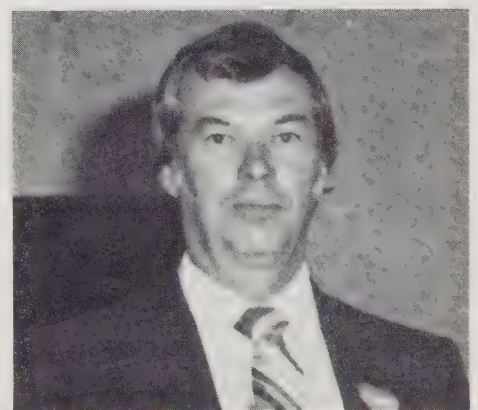
Registration and ticket desks are open Sunday, May 9, from 2-8 pm, Monday and Tuesday, May 10 to 11 from 8 am - 5 pm, and Wednesday, May 12 from 8:30 am - 12 noon.

Convention Committee

A variety of clinics and social events have been planned for the May 9 to 12 joint CDA/ODA Convention in Toronto, thanks to the 1982 convention committee, chaired by Dr. George Stirling.

Members of the committee also include: Dr. Len Shapira (vice-chairman, general arrangements); Dr. Joe Druck (group clinics); Dr. Ron Anco (clinic chairmen); Drs. Rollin Matsui and Nick Poliszchuk (table clinics); Dr. Peter Wozniuk (exhibits); Drs. Howard Ferguson and Harvey MacDonald (equipment); Drs. Peter Markie and Gene Cervini (registration); Dr. Gord Perlmutter (host for clinicians); Dr. Walter Misek (run); and Dr. John Marotta (luncheons).

Convention hosts are Drs. Grant Joyner, Bert Levin, Bill MacKenzie and Don McKee. The social committee consists of Drs. Al Lachowicz, Rod Moran and Ron Martin, and Dr.



Dr. George Stirling is the chairman of the 1982 joint CDA/ODA Convention, being held May 9 to 12 at Toronto's Sheraton Centre.

Ken Levinson is the photographer.

Representatives from other associations are: Maureen Donoghue (ODHA); Mrs. Diane Pike and Mrs. Pat Miller (ODN & AA); Linda Teteruck (CDA). The executive liaison is Dr. Neil Munro while Dr. Bob Schiewe and Mr. John Gillies are ex officio members.

Convention

Other Meetings Scheduled

Several other organizations have planned meetings around the CDA/ODA Convention, May 9 to 12, in Toronto.

The Academy of General Dentistry, Ontario division, meets Sunday, May 9, in the Essex Room of The Sheraton Centre to hear Dr. Harold Nemetz of California speak about crown and bridge innovations. Registration is \$45 in advance and \$55 after April 20 for AGD members, and \$135 advance and \$145 after April 20 for non-members.

The Ontario chapter of the Canadian Society of Dentistry for Children

also meets that day in the Dominion Ballroom of The Sheraton Centre. Speakers are Mr. Doug Young, who will discuss communication between the dentist and patient, and Dr. Louis Ripa, who will talk about fluoride and the prevention of tooth decay. Registration fees are \$70 for dentists, \$30 for auxiliaries and students, and \$85 for out of province guests.

The Canadian Dental Hygienists' Association is meeting at the Holiday Inn Downtown May 7 to 9. An education seminar is one of the program highlights.

The Ontario Dental Nurses & Assistants Association and the Ontario Dental Hygienists Association meet May 9 to 12 at the Holiday Inn Downtown.

Other specialty groups meeting are the Canadian Academy of Prosthodontists, May 7 to 8, at the Park Plaza Hotel; Ontario Society of Periodontists, May 7 to 8, at The Sheraton Centre; Canadian Society of Public Health Dentists, May 8 to 9, at The Sheraton Centre; Canadian Society of Orthodontists, May 8 to 9, at The Sheraton Centre.

Toronto Offers Many Attractions

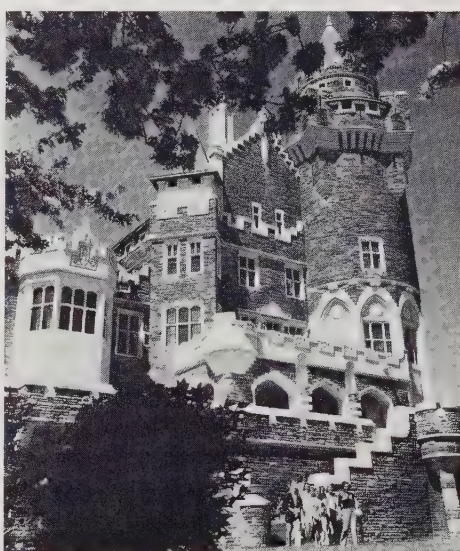
Toronto is a city full of discoveries for the visitor.

Ontario's capital offers something exciting for everyone. There are ethnic restaurants to sample, unique pubs, lounges and theatre complexes to visit, exciting shops for browsing, and lots of fascinating museums, historic buildings and tourist spots in which to lose yourself.

There's a romantic journey not to be missed when you're out wandering Toronto's streets this spring.

Among the special sites you ought to visit are the Toronto Islands, which can be reached by ferry from the foot of Bay Street, and Black Creek Pioneer Village where costumed residents carry out their chores, skills, crafts and trades. Fort York, a restored fort of the War of 1812 period, creates the sights and sounds of an early 19th century British garrison. And then there's Harbourfront, 92 acres of art shows, craft studios and lakeside restaurants, all fronting Lake Ontario.

Other attractions include: Casa Loma, a dream castle with 98 rooms and huge pipe organ; Metro Toronto



Casa Loma, the dream castle with 98 rooms and a huge pipe organ, is just one of the attractions Toronto has to offer. Visitors to the joint CDA/ODA Convention May 9 to 12 can also visit the Ontario Science Centre, Black Creek Pioneer Village, Fort York, Metro Toronto Zoo and McLaughlin Planetarium.

Zoo with special rides for youngsters; McLaughlin Planetarium; Ontario Science Centre, a scientific wonderland.

But perhaps the biggest attraction of all is the world's tallest free-standing structure. The CN Tower on

Front Street West features observation decks, disco and revolving restaurant.

Toronto has planned special events and festivities for its visitors. During the month of May, the Canadian Opera Company will be performing at the O'Keefe Centre while the Toronto Symphony will be going full force in Massey Hall. The Toronto Theatre Festival is also performing at this time.

While you're touring the city, you'll work up an appetite. Toronto offers a variety of restaurants ranging from continental cuisine to Chinese and Argentinian fare to traditional home style and French-Quebecois cooking. Whatever your culinary taste, tempt your palate at one of many fine restaurants in the city.

Toronto is a story of exciting shops, fascinating restaurants, unique pubs and theatres. It's a story of endless music, fashion and entertainment activities.

Discover the world of Toronto while you are attending the CDA/ODA convention May 9 to 12.

REGISTRATION FORM
CDA/ODA Convention

The Sheraton Centre, Toronto, May 9-12, 1982

Please complete and mail with your cheque to:
CDA/ODA Convention
234 St. George Street, Toronto, Ontario, M5R 2P1
(Make cheque payable to CDA/ODA Convention)

Dentists

CDA and ODA Members or Members of a recognized
Dental Society in another Province or State

\$85.00 \$ _____

Non Members \$135.00 \$ _____

Fee includes admission to all Scientific Sessions,
Commercial Exhibits, Monday Breakfast and three
Luncheons.

Sunday Evening, May 9

Buffet dinner and dancing

Tickets \$15.00 per person \$ _____

Monday Evening, May 10

Cocktails with Peter Appleyard

Dinner-theatre with Second City Revue

Tickets \$20.00 per person \$ _____

Tuesday Evening, May 11

Fun Nite — Informal Party — dancing

Tickets \$5.00 per person \$ _____

Ladies — Monday, May 10

Luncheon and Fur Fashions at the top of the CN Tower

Tickets \$15.00 per person \$ _____

Wednesday, May 12

Farewell Champagne Breakfast

Tickets \$5.00 per person (Ladies only) .. \$ _____

Total enclosed \$ _____

Dr. _____
Given or common name Surname

Spouse's name _____

Address _____

To avoid loss, no tickets will be mailed. Advance registrations can be picked
up at the Advance Registration Desk, Lower Mezzanine, Sheraton Centre
during the meeting commencing Sunday, May 9 at 2 p.m.

FORMULAIRE D'INSCRIPTION

Congrès de l'ADC et de l'ADO

Centre Sheraton de Toronto, du 9 au 12 mai 1982

Veuillez remplir ce formulaire et le retourner avec votre chèque à
l'adresse suivante:

Congrès de l'ADC et de l'ADO
234 St. George Street, Toronto, Ontario, M5R 2P1
(Établissez le chèque au nom du Congrès de l'ADC et de l'ADO.)

Dentistes

Les membres de l'ADC et de l'ADO ou les membres d'une
société reconnue d'une autre province ou d'un État

85\$ \$ _____

Non membres 135\$ \$ _____

Cette somme couvre l'entrée à toutes les conférences
scientifiques et à l'exposition commerciale, le petit-
déjeuner du lundi et trois déjeuners.

Dimanche soir, le 9 mai

Buffet et danse

15\$ par personne \$ _____

Lundi soir, le 10 mai

Cocktail avec Peter Appleyard

Dîner-spectacle avec le groupe de Second City Revue

20\$ par personne \$ _____

Mardi soir, le 11 mai

Partie de plaisir — tenue de ville — danse

5\$ par personne \$ _____

Dames — Lundi, le 10 mai

Déjeuner et présentation d'une collection de fourrures à la
tour du CN

15\$ par personne \$ _____

Mercredi, le 12 mai

Déjeuner au champagne

5\$ par personne (dames seulement) \$ _____

Total \$ _____

Dr. _____
(prénom) (nom)

Nom de l'épouse _____

Adresse _____

Afin d'éviter les pertes, les billets ne seront pas expédiés par la poste, mais
retenus au comptoir des inscriptions faites au préalable qui sera situé à la
mezzanine inférieure du Centre Sheraton où vous pourrez les cueillir le
dimanche, 9 mai, à compter de 14 heures.

Congrès

Programme social du congrès

Le Congrès de l'ADC et de l'ADO qui se tiendra du 9 au 12 mai prochains, au Centre Sheraton de Toronto, promet d'offrir à ses participants un programme riche et varié.

En effet, outre les conférences, les discussions cliniques en table ronde et les démonstrations habituelles, les organisateurs du congrès ont prévu plusieurs activités. Parmi les plus importantes, mentionnons la course familiale, un buffet et une soirée dansante le jour de l'ouverture, un spectacle mettant en vedette Peter Appleyard et le groupe de *Second City Revue*, ainsi que plusieurs réunions de classe.

Depuis que le Dr Roger Ellis en a promu l'idée en 1979, la course familiale gagne en popularité chaque année et tend à s'établir comme une tradition. Son organisateur, le Dr Walter Misek, prévoit que plus de 200 personnes y prendront part. Elle aura lieu dimanche, le 9 mai, à 11 heures, sur Centre Island, et marquera le début du congrès.

La course est un événement qui fait maintenant partie du congrès, de commenter le Dr Misek. De plus, elle encourage les gens à se maintenir en forme.

Les détails de la course ne sont pas encore au point, mais les participants devront se présenter sur les lieux à 10h30. Les catégories sont ouvertes tant aux dames qu'aux messieurs de 60 ans et plus, de 50 à 59 ans, de 40 à 49 ans ainsi qu'aux garçons et filles de 16 ans ou moins. Les gagnants de ces catégories, de même que les meilleurs coureurs et coureuses, se verront décerner des trophées lors du dîner dansant qui aura lieu dans la soirée.

Les intéressés sont invités à s'inscrire soit avant le 15 avril pour la somme de 8\$ par personne ou de 16\$ par famille, soit lors de l'arrivée au

congrès pour 10\$ par personne ou 20\$ par famille.

La soirée du dimanche débutera par un cocktail à 18 heures, suivi d'un buffet à 19 heures et d'une danse en l'honneur des générations. Les personnes qui désirent participer à cette soirée sont priées de se procurer des billets de plus tôt possible, leur nombre étant limité.

Lundi, le 10 mai, avant le début des conférences et des cliniques, soit de 7h30 à 9 heures, le petit-déjeuner sera servi à titre gracieux. Le soir, les congressistes seront invités à un dîner accompagné d'un spectacle présenté par le célèbre groupe de *Second City Revue*. Le dîner aura lieu à 19 heures et Peter Appleyard fera les frais de la musique.

Le mardi, à 20 heures, le congrès prendra l'allure d'une immense partie de plaisir et les participants seront conviés à danser au rythme des *Nova Sounds*.

Le congrès comprendra également deux déjeuners importants, l'un servi le lundi par l'ADC et l'autre le mardi pour marquer l'investiture du nouveau président de l'ADO, le Dr D.B. Smith, de Belleville.

En plus de ces activités, un programme a été préparé à l'intention des dames. Le lundi matin, le Dr Hamilton Hall, spécialiste des maladies du dos, donnera une conférence. À 13h30, on servira un déjeuner et on présentera une collection de fourrures à la tour du CN. Le mardi, à 14 heures, Mons. J.R. Porter, de la maison Josiah Wedgwood, offrira une démonstration qui sera suivie d'un vins et fromages. Le mercredi matin, le programme des dames se terminera par un petit-déjeuner au champagne.

Comme d'habitude chaque année, il y aura une exposition commerciale et diverses assemblées reliées au congrès. Les participants seront donc assurés de trouver quelque chose qui les intéressera en tout temps.

Vous pouvez commander des billets pour les activités sociales en vous inscrivant au congrès. Vous êtes prié d'utiliser le formulaire d'inscription et le bon de commande inclus dans la

pochette qu'on vous a fait parvenir. Les billets que vous commanderez ne vous seront pas expédiés par la poste mais déposés dans une enveloppe qui portera votre nom et qui vous sera remise quand vous vous présenterez au bureau d'inscription situé à la mezzanine inférieure du Centre Sheraton.

Vous pourrez également vous procurer des billets de 14 heures à 20 heures, dimanche, le 9 mai; de 8 heures à 17 heures, lundi et mardi, les 10 et 11 mai; et de 8h30 à midi, mercredi le 12 mai.

Congrès: assemblées connexes

À l'occasion du Congrès de l'ADC et de l'ADO qui aura lieu à Toronto du 9 au 12 mai, plusieurs autres organisations tiendront des assemblées.

Le dimanche, 9 mai, la division ontarienne de l'Académie de dentisterie générale se réunira dans la salle Essex du Centre Sheraton pour la conférence du Dr Harold Nemetz, de la Californie, qui parlera des dernières innovations apportées aux bridges et aux couronnes. Les frais d'inscription pour les membres sont de 45\$ avant le 20 avril et de 55\$ après cette date, et pour les non membres, de 135\$ avant le 20 avril et de 145\$ après cette date.

Le même jour, le chapitre ontarien de la Société canadienne de dentisterie pour les enfants s'assemblera dans la salle de bal Dominion du Centre Sheraton. Les conférenciers sont M. Doug Young, qui parlera des rapports entre dentiste et patient, et le Dr Louis Ripa, qui traitera du fluor et de la prévention des caries. Les frais d'inscription sont de 70\$ pour les dentistes, de 30\$ pour les auxiliaires et les étudiants, et de 85\$ pour ceux qui ne résident pas en Ontario.

Du 9 au 12 mai, l'Association des gardes-malades et des assistants dentaires de l'Ontario et l'Association des hygiénistes dentaires de l'Ontario s'

se réuniront au Holiday Inn du centre-ville.

Au même endroit, du 7 au 9 mai, l'Association canadienne des hygiénistes dentaires tiendra une assemblée dont le clou sera un séminaire sur l'éducation.

Parmi les autres organisations qui tiendront des assemblées, mentionnons l'Académie canadienne des prothésistes (les 7 et 8 mai, à l'hôtel Park Plaza), la Société ontarienne des spécialistes en parodontologie (les 7 et 8 mai, au Centre Sheraton), la Société canadienne des dentistes de la santé publique (les 8 et 9 mai, au Centre Sheraton) et la Société canadienne des orthodontistes (les 8 et 9 mai, au Centre Sheraton également).

Le Comité du congrès 1982

Grâce au Comité du congrès présidé par le Dr George Stirling, plusieurs activités cliniques et sociales ont été prévues pour le Congrès mixte de l'ADC et de l'ADO qui aura lieu du 10 au 12 mai, à Toronto.

Les autres membres du comité sont: le Dr Len Shapira, vice-président (programmation générale); le Dr Joe Druck (cliniques collectives); les Drs Hollin Matsui et Nick Poliszchuk (cliniques en table ronde); le Dr Peter Wozniuk (exposition commerciale); les Drs Howard Ferguson et Harvey MacDonald (équipement); les Drs Peter Markie et Gene Cervini (inscriptions); le Dr Gord Perlmutter (hôte des conférenciers cliniques); le Dr Walter Misek (course); et le Dr John Marotta (déjeuners).

Les hôtes du congrès sont les Drs Grant Joyner, Bert Levin, Bill MacKenzie et Don McKee. Le comité social se compose des Drs Al Lachowicz, Rod Moran et Ron Martin. La photographie a été confiée au Dr Ken Levinson.

Les représentants des autres associa-

tions sont: Mme Maureen Donoghue (A.H.D.O.), Mmes Diane Pike et Pat Miller (A.G.-M.A.D.O.); Mme Linda Teteruck (A.D.C.). Le Dr Neil Munro agit comme agent de liaison du service administratif tandis que le Dr Bob Schiewe et M. John Gillies sont membres nommés d'office.

Découvrez Toronto...



Centre O'Keefe

Pour le visiteur curieux, Toronto offre mille merveilles à découvrir.

En effet, la capitale de l'Ontario sait satisfaire tous les goûts et contenter tous les caprices. On y trouve des restaurants de toutes les nationalités, des pubs ayant un cachet particulier, des bars et des cafés, des théâtres, des boutiques, des musées, des constructions présentant un intérêt historique ainsi que des lieux touristiques où il fait bon s'évader.

Et comme ce sera le printemps, il faudra profiter des nombreuses excursions qui s'offrent au promeneur.

Parmi les lieux d'un intérêt tout particulier, il faut mentionner les îles qu'on peut atteindre par bateau à partir des quais situés au bas de la rue Bay, et le *Black Creek Pioneer Village* où les résidents costumés vaquent à leurs occupations, commerces et métiers d'art de toutes sortes. Par ailleurs, à *Fort York*, un fort construit

durant la Guerre de 1812 et habilement restauré, on revivra les heures glorieuses d'une garnison britannique au début du XIX^e siècle. Et puis il y a *Harbourfront*, nouveau complexe d'immeubles érigé sur les rives du lac Ontario et abritant des restaurants, des boutiques et des galeries d'art.

Également dignes d'intérêt sont *Casa Loma*, un élégant château comprenant 98 pièces et un orgue immense, le zoo de Toronto qui sait enchanter jeunes et moins jeunes, le planétarium McLaughlin ainsi que l'*Ontario Science Centre*, un monde transformé par la magie des découvertes scientifiques les plus fascinantes.

Cependant, le point d'intérêt qui s'impose entre tous est certes la tour du CN, la structure autonome la plus élevée du monde entier. Située rue Front ouest, elle loge dans sa nacelle et à son sommet des salles d'observation, une discothèque et un restaurant tournant.

Toronto offre à ses visiteurs une gamme d'activités très variées. Durant le mois de mai, la *Canadian Opera Company* présentera deux opéras au Centre O'Keefe, tandis que l'Orchestre symphonique de Toronto donnera des concerts au Massey Hall. De plus, ce sera le temps du Festival de théâtre de Toronto.

La visite de la ville vous mettra sûrement en appétit. Il n'en tiendra qu'à vous de satisfaire vos goûts et vous serez sans doute embarrassé pour choisir parmi les nombreux restaurants français, chinois, argentins, canadiens ou québécois. Quelles que soient vos préférences, vous serez comblé au-delà de tous vos souhaits.

Découvrez les mille et une facettes de Toronto. La métropole du Canada ne finit pas d'étonner les curieux avec ses boutiques, ses restaurants, ses pubs et ses théâtres. Tout autant que l'amateur de musique et de spectacle, l'amateur de la mode et de l'élégance sait y trouver ce qu'il cherche.

Ce monde sera à votre portée lors du Congrès de l'ADC et de l'ADO, du 9 au 12 mai 1982. Soyez au rendez-vous!

Le Dr Bedford nommé conseiller principal



Le sous-ministre de Santé et Bien-être social, M. J.L. Fry, le sous-ministre adjoint à la Direction générale

des services et de la promotion de la santé, le Dr Maureen Law, et le sous-ministre adjoint à la Direction générale des services médicaux, le Dr L.M. Black, sont heureux d'annoncer la nomination, par la Commission de la Fonction publique du Canada, du Dr William Bedford au poste de conseiller principal en dentisterie à la Direction générale des services et de la promotion de la santé et à la Direction générale des services médicaux. Cette nomination relève en effet des deux directions mentionnées.

Antérieurement, le Dr Bedford occupait le poste de directeur de la santé dentaire de la région du Manitoba à la Direction générale des services médicaux.

De 1959 à 1974, puis de 1975 à 1976, il avait une pratique privée à

Richmond Hill, en Ontario. À la même époque, il faisait partie de la Faculté dentaire de l'Université de Toronto comme instructeur clinique à temps partiel d'abord, puis en 1971 et 1975, comme professeur et instructeur dentaire à plein temps à l'École de thérapie dentaire de Forth Smith dans les Territoires du Nord-Ouest.

C'est en 1976 que le Dr Bedford a été nommé directeur de la santé dentaire de la région du Manitoba à la Direction générale des services médicaux. À ce poste, il a également assumé, durant 18 mois, les responsabilités de directeur suppléant des Services de maintien de la santé. En mai 1981, il a été affecté provisoirement à la Direction générale des services médicaux, à Ottawa, à titre de conseiller dentaire.

Examen du Régime de soins dentaires de la Saskatchewan

Le Régime de soins dentaires de la Saskatchewan s'est gagné l'appui enthousiaste des parents et ses réalisations en font, semble-t-il, le meilleur régime de soins dentaires aux enfants en Amérique du Nord. Cela n'a toutefois pas réussi à dissiper les inquiétudes que le Collège des chirurgiens dentistes de la province avait formulées lors de la mise en place du régime en 1974.

Par ailleurs, malgré les doutes qui subsistent encore, le Dr G.H. Peacock, secrétaire, registraire et trésorier du collège, note que le corps professionnel appuie, dans l'ensemble, les recommandations que le Dr D.W. Lewis, chef du département de dentisterie communautaire à l'Université de Toronto, a formulées dans une analyse du régime et de ses résultats.

Les recommandations vont d'une gamme de propositions "internes" visant à améliorer le régime dans son ensemble à une suggestion portant sur l'analyse détaillée et périodique (peut-être tous les cinq ans) de l'état de santé buccale des enfants et des adolescents de la Saskatchewan, qui serait faite, à partir d'un échantillonnage, par une équipe d'examineurs formés à cette fin.

Le gouvernement de la province a commencé récemment d'étendre son régime de soins dentaires aux jeunes de 14 et 15 ans, et la perspective de voir le programme s'appliquer à tous les jeunes gens de moins de 18 ans n'est pas sans projeter, selon le Dr Peacock, une "ombre" sur le milieu dentaire à la pensée que les cliniques provinciales pourraient, un jour, four-

nir tous les services dentaires dans la province.

Le Dr Peacock se montre cependant optimiste. La participation accrue des dentistes au nouveau programme touchant les adolescents indique, de façon significative, que le gouvernement provincial reconnaît qu'il y a place pour la pratique privée.

L'étude que le Dr Lewis a menée sur les années de rodage du régime fait état d'un sondage effectué en 1978-1979 auprès de 600 parents et tuteurs. Le résultat indique que "malgré de légères inquiétudes, on a noté un appui enthousiaste au régime, à son organisation et aux services dispensés par les infirmiers et infirmières dentaires."

Toutefois, le Dr Peacock souligne que le collège des chirurgiens denti-

es de la province s'inquiète du fait que "la fluoration de l'eau potable de toutes les collectivités n'a pas été réalisée comme prévu, malgré le caractère supposément fort préventif du programme."

Il ajoute que le collège croit toujours que les parents devraient avoir la liberté de choix, sans égard à leurs moyens financiers, pour conduire leurs enfants soit chez l'infirmier ou l'infirmière soit chez le dentiste. En vertu du programme, les enfants adhérant au Régime de soins dentaires de la Saskatchewan reçoivent les soins de base sans frais directs. Quant aux enfants qui vont chez un dentiste de pratique privée, leurs parents doivent en assumer les frais, à moins que le cas n'ait été référé par une clinique dentaire provinciale.)

En outre, le collège prétend toujours que les dentistes devraient exercer une plus grande surveillance sur l'application du régime. Le Dr Peacock maintient que l'infirmier ou l'infirmière dentaire ne devrait dispenser aucun traitement sans la présence d'un dentiste sur les lieux "pas nécessairement par-dessus l'épaule mais sur les lieux." Il souligne que le collège ne s'est jamais opposé à ce que les soins dispensés aux enfants en vertu du programme le soient par des infirmiers ou infirmières dentaires.

Si le professeur Lewis note qu'il est difficile de tirer des conclusions fermes sans comparaison avec un groupe témoin, le rapport suggère quand même que plus les jeunes de la Saskatchewan se soumettent au régime de soins dentaires, plus le nombre de caries des dents permanentes diminue. La diminution constatée est cependant faible: environ 0,1 à 0,2 dents DMF par année. Les données ne permettent pas de tirer des conclusions en ce qui a trait aux dents de lait.

L'étude établit qu'un très grand pourcentage de tous les enfants de la

Saskatchewan — 73 p. 100 en 1979 — 1980 — reçoit des soins dentaires complets. Elle conclut que, si on y ajoute les enfants qui reçoivent des soins partiels en vertu du régime et ceux qui reçoivent des soins partiels ou complets dans les cabinets de pratique privée, le recours aux services dentaires est probablement plus élevé en Saskatchewan que dans toute autre grande région d'Amérique du Nord (il se situerait dans les 90 p. 100, selon le Dr Lewis).

Le rapport établit que les enfants de la Saskatchewan tirent avantage du régime dans une proportion qui est de 20 p. 100 supérieure à l'usage qu'en font ceux des trois autres provinces qui ont un régime complet de soins dentaires (Terre-Neuve, la Nouvelle Écosse et le Québec), mais où l'on a recours à la pratique privée rémunérée à l'acte. La situation en Saskatchewan se compare cependant à celle de l'Île du Prince-Édouard qui utilise, elle aussi, un personnel dentaire salarié dans des cliniques scolaires.

Dans ses observations, le Dr Peacock prévient que, s'il semble avoir bien réussi en Saskatchewan, le régime "peut réussir ou pas dans les autres régions du Canada, compte tenu de la main-d'oeuvre et de divers autres facteurs."

C'est cette même réussite qui fait, selon le Dr Peacock, que beaucoup de jeunes dentistes de la province cherchent à établir leur cabinet de pratique ailleurs, notamment en Alberta et en Colombie-Britannique. En 1981, la Saskatchewan comptait 333 dentistes dont 285 environ étaient en pratique privée, les autres travaillant pour le régime de soins dentaires ou enseignant au collège de dentisterie ou dans les écoles de formation des infirmiers et infirmières ainsi que des assistants dentaires.

Comme les cliniques établies en vertu du régime traitent la grande

majorité des enfants de moins de 15 ans, les nouveaux dentistes voient diminuer constamment le besoin de nouveaux cabinets de pratique privée.

"Nous aimerions conclure avec le gouvernement une entente qui nous permettrait d'offrir nos services aux enfants, de souligner le Dr Peacock au cours d'une entrevue. Les seuls services que nous offrons aux enfants s'adressent à ceux qui préfèrent aller chez le dentiste et en assumer les frais ou à ceux qui nous sont envoyés par le régime, parce que le traitement dont ils ont besoin dépasse la compétence de l'infirmier ou de l'infirmière dentaire."

Le rapport du Dr Lewis précise que l'adhésion générale des enfants admissibles au régime de soins dentaires a été très élevée après la première année, 83 p. 100 en moyenne. Le pourcentage de ceux qui y ont adhéré chaque année et qui ont reçu des soins complets, tels que définis par le régime, est aussi élevé, une moyenne de 76 p. 100 à 90 p. 100 depuis 1974 à 1975.

Le rapport note que, si le coût global du régime a augmenté de 3,9 fois entre 1974 — 1975 et 1979 — 1980 (passant de 2,14 millions de dollars à 8,31 millions, sans correction des effets de l'inflation), le coût par enfant inscrit au régime a baissé de façon spectaculaire, de 163,05 \$ à 68 \$.

En matière de coût, si on le compare aux quatre autres régimes du pays qui offrent des soins dentaires complets aux enfants, celui de la Saskatchewan semble donner un rendement plus efficace, ou du moins égal, à un coût moindre, ou du moins égal.

Le collège des chirurgiens dentistes a mis en doute le coût de 68 \$ par enfant, alléguant qu'on n'avait pas tenu compte de tous les frais réels. Il soutient que la somme aurait été plus réaliste si on avait inclu le coût des locaux et d'autres éléments.

Rapport sur les indemn t s
de l'assurance-vie pour l'ann e 1980

Fid le   la coutume, l'Association canadienne des compagnies d'assurance-personne (ACCAP) vient de publier les r sultats de l'enqu te sur les indemn t s des assurances-personne pour l'ann e 1980.

Durant les ann es 1969   1979 inclusivement, cette enqu te annuelle  tait men e sous l' gide de l'Association canadienne des assureurs-acci-

dent maladie (ACAAM). Au cours des ann es 1950   1960, des enqu tes avaient  t  faites par l'Association canadienne des compagnies d'assurances (ACCA) et par la Conf rence canadienne sur les soins de sant .

Avec le rapport de l'ann e 1980, l'ACCAP maintient une coutume fort valable. Notons que l'ACCAP a  t 

cr e le 1 r janvier 1981, fusionnant l'ACAAM et l'ACCA.

 tant donn  que la nouvelle association a inclus dans son rapport des compagnies d'assurance dont les enqu tes ant rieures ne tenaient pas compte, des r serves s'imposent quand on compare les r sultats de l'ann e 1980 avec ceux des ann es pr c dentes. Cependant, il appa-

Tableau no 12 — Assurance dentaire — Collective
L'Association canadienne des compagnies d'assurance-personne
Rapport sur les indemn t s vers es au Canada en 1980

Province	Contrats en vigueur	Nombre de personnes assur�es		Primes souscrites	Indemn�t�s
		Employ�s	Personnes � charge		
Terre-Neuve	66	9 383	20 616	1 708 651\$	853 140\$
�le-du-Prince-�douard	20	2 560	5 156	366 083	177 505
Nouvelle-�cosse	232	30 359	55 288	5 655 204	2 553 929
Nouveau-Brunswick	130	17 391	35 166	2 842 154	2 146 732
Qu�bec	1 695	270 305	449 585	38 064 252	29 762 540
Ontario	6 832	1 099 205	1 905 633	179 228 821	162 033 462
Manitoba	580	54 118	93 905	8 817 113	8 126 174
Saskatchewan	351	37 660	67 220	5 978 292	4 323 407
Alberta	3 052	240 073	420 932	43 270 891	37 402 069
Colombie-Britannique	3 625	231 993	368 998	51 713 895	51 935 386
Yukon et Territoire du Nord-Ouest	23	7 348	13 108	886 918	715 378
Sommes non assign�es par province	1 050	1 089	1 809	2 912 109	2 190 140
Totaux	17 656	2 001 484	3 437 416	341 444 383\$	302 219 862\$

Services administratifs seulement

	1978	1979	1980
Contrats dentaires en vigueur	8	25	32
Indemnités (x 1 000)	1 414\$	7 907\$	20 370\$
Nombre d'assurés			
— employés			164 213*
— personnes à charge			272 956*

*Une compagnie d'assurance n'a pas indiqué le nombre des personnes assurées.

que, de façon générale, l'augmentation de 1980 suit logiquement les résultats des enquêtes passées.

Le total des primes souscrites en 1980 par les 59 compagnies affiliées à l'ACCAP atteint 1 704,9 millions de dollars, dont 89,5 pour cent sont pour les assurances collectives.

Les indemnités versées aux assurés s'élevaient à 255,6 millions de dollars. Les indemnités dentaires représentent 25,5 pour cent de cette somme.

Pour la troisième année consécutive, on a demandé aux compagnies affiliées de mentionner les régimes d'assurance-maladie pour lesquels elles ont fourni des services administratifs seulement (SAS). Pour ce qui a trait au nombre des employés et des personnes à charge qui sont assurés, les rapports manquent d'homogénéité, mais les renseignements touchant le nombre des contrats et des indemnités sont conséquents d'une année à l'autre.

Le rapport touchant le nombre des employés et des personnes à charge qui sont assurés en vertu de contrats de type SAS est plus complet pour 1980 que pour les années antérieures. Aussi, même si les données disponibles n'indiquent pas qu'elle est la tendance dans ce domaine, ne sont-elles pas totalement dépourvues d'intérêt.

Maintenant que l'indice d'inflation atteint les deux chiffres et que les pressions économiques deviennent plus fortes, il semble que plusieurs employeurs désirent que les employés

défraient eux-mêmes leurs primes d'assurance. De cette manière, ils comptent épargner la taxe de deux pour cent payable au gouvernement pour les primes d'assurance. De plus, ils craignent d'avoir à assumer les frais si l'expérience se révèle négative. Toutefois, ces mêmes employeurs font toujours appel à des assureurs qualifiés pour les services d'administration touchant les réclamations, pour les analyses financières et pour la préparation de brochures de renseignements à l'intention des patients.

Dans une enquête sur les régimes d'assurance dentaire menée par une firme fournissant des services d'assurance et de gestion en Ontario, à savoir la firme *Tillin Ehast, Nelson and Warren Inc.*, il a été démontré que 20 compagnies ont adopté un régime avec prime additionnelle ou défrayé par l'employé, 19 compagnies font appel à des compagnies d'assurance pour l'administration des réclamations, aucune n'utilise ses propres services et une a recours à d'autres moyens non spécifiés. Il est intéressant de noter que les principales raisons pour justifier l'adoption d'un régime avec prime additionnelle ou défrayé par l'employé sont d'ordre économique et relèvent du fait que d'autres bénéfices sont obtenus de la même façon. L'expérience semble confirmer qu'on a raison d'avoir une plus grande confiance dans cette méthode.

Clyde Covit, D.D.S

FLUORINSE®

(Sodium fluoride oral solution)

COMPOSITION: Contains sodium fluoride in a pleasantly flavoured solution at neutral pH. Contains alcohol (3% by volume).

INDICATIONS: Dental caries prophylactic

PRECAUTIONS: For buccal administration only.

DO NOT SWALLOW

Swallowing of solution may cause nausea. Usage in excess of recommended dosage may cause dental fluorosis.

DIRECTIONS: Swish vigorously in the mouth for approximately 1 to 2 minutes (preferably at bedtime after brushing and flossing teeth thoroughly) 1 to 2 teaspoonfuls (5 to 10 ml) of FLUORINSE.

Expectorate, DO NOT SWALLOW. For maximum benefit, do not eat or drink for a period of 30 minutes after rinsing.

Weekly Rinse	Daily Rinse	Weekly Rinse
Cinnamon (red) 0.2% sodium fluoride	Ice Mint (blue) 0.5% sodium fluoride	Mint (green) 0.2% sodium fluoride

HOW SUPPLIED: Fluorinse is available in 450 ml plastic bottles with child-resistant caps.

CAUTION: Keep out of reach of children.

FLOZENGES®

(Sodium fluoride tablets)

COMPOSITION: Contains sodium fluoride in lozenge form. Contains no sugar, saccharin or cyclamate.

INDICATIONS: Dental caries prophylactic for buccal and systemic administration.

PRECAUTIONS: If this product is used in an area where the drinking water has a natural fluoride content in excess of 0.7 parts of fluoride ion per million parts of water, or is artificially fluoridated, fluorosis of the tooth enamel may result.

CONTRAINDICATIONS: Sodium-free diets

RECOMMENDED DOSAGES SCHEDULE:

Age	Concentration of fluorine in drinking water (p.p.m.)		
	<0.3	0.3-0.7	>0.7
2 weeks to 2 years	0.25 mg daily (½ orange tablet)	0 mg daily	0 mg daily
2 to 3 years	0.5 mg daily (1 orange tablet)	0.25 mg daily (½ orange tablet)	0 mg daily
3 to 16 years	1.00 mg daily (1 strawberry tablet)	0.5 mg daily (½ strawberry tablet)	0 mg daily

After brushing the teeth allow the tablet to dissolve slowly in the mouth and swallow the resultant liquid. Initially, for infants, the tablet can be dissolved in juice or crushed in food. However, once teeth have erupted the infant should be encouraged first to chew and eventually, when older, to suck the tablets as described above.

HOW SUPPLIED: Flozenges are available in plastic child-resistant containers of 120 lozenges.

Two Flavours:

Orange	Strawberry
0.5 mg of fluoride ion	1.0 mg of fluoride ion

CAUTION: Keep out of reach of children. Exceeding recommended dosage over a prolonged period of time may be harmful.

Available in pharmacies only.

Full information on request.



Cooper Laboratories Limited
Boisbriand, Que.

Du nouveau à l'Ontario Science Centre

On sait que l'hygiène buccale est un sujet guère populaire auprès des écoliers.

Dernièrement cependant, l'Ontario Science Centre de Toronto venait au secours de la profession dentaire pour répandre le message d'une bonne santé buccale.

À la mi-novembre, le centre offrait en effet une nouvelle présentation dentaire. Destinée aux milliers d'écoliers — et adultes — qui visitent le centre chaque année, la présentation de vingt minutes souligne l'importance de la prévention en matière de santé dentaire.

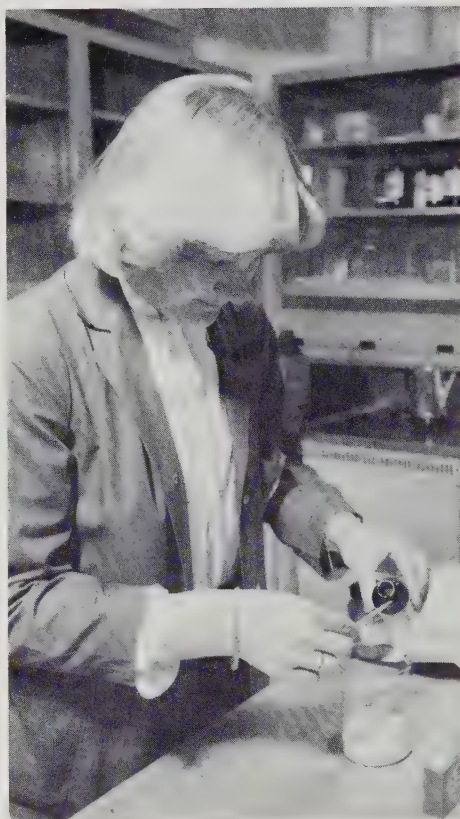
Selon Tiina Jarvalt, instructrice en biologie, et son collègue Earl Sweeney, les renseignements donnés sont précis et la démonstration ne comprend ni diagnostic ni traitement.

Au contraire, les démonstrateurs se conforment au seul mode d'approche du centre qui est d'encourager le visiteur à se renseigner par l'expérience. Les volontaires sont invités à se rincer la bouche avec une solution teintée qui met en évidence la plaque dentaire, à se nettoyer les dents avec de la soie floche ou à examiner à l'aide d'un microscope les bactéries cueillies dans leur bouche.

Le centre espère que cette présentation sera populaire. Trois étés passés, on a fait une présentation dentaire à titre d'essai, mais c'est à peine si on a réussi à attirer une trentaine de personnes par jour.

Conçue par un hygiéniste dentaire du Service de la santé publique torontois, la nouvelle présentation sera permanente et sera donnée dans le *Hall of Life* du centre scientifique. Elle fera partie de plusieurs présentations médicales qui cherchent à renseigner le visiteur sur divers sujets allant du système reproducteur aux applications du rayon laser en médecine.

De l'avis des deux démonstrateurs, plusieurs personnes ne se soucient



C'est donc comme ça qu'on fait de la pâte à dent! Tiina Jarvalt, du centre des sciences de l'Ontario, montre quelle en est la recette. Le dentifrice sera tout aussi efficace que le produit acheté au magasin même s'il ne goûte pas aussi bon.

pas de leurs dents. Il en est même qui ignorent combien de dents ils devraient avoir.

"On nous fait toutes sortes de commentaires, de dire Mme Jarvalt. Plusieurs pensent qu'en vieillissant, il est naturel de perdre ses dents. Certains vont jusqu'à croire qu'au moment de prendre leur retraite, ils auront perdu toutes leurs dents."

Mme Jarvalt et son collègue s'occupent également de recueillir les questions posées par les visiteurs et ils comptent sur la profession dentaire pour les aider à fournir des réponses appropriées.

Bien qu'ils aient passé deux mois à collectionner des modèles, des brochures, des dépliants et du matériel divers en vue de la présentation, les deux démonstrateurs savent qu'ils

devront toujours se tenir au courant des dernières découvertes en dentisterie. Aussi espèrent-ils avoir éventuellement un groupe ressource qui répondra à leurs besoins.

Entre-temps, quand ils ignorent la réponse à une question qu'on leur pose, ils conseillent aux gens de consulter le dentiste.

"Plusieurs personnes n'interrogent pas le dentiste au sujet de leurs problèmes dentaires, d'affirmer Mme Jarvalt. Elles ne sont tout simplement pas conscientes des problèmes de santé qui sont liés aux maladies dentaires."

La présentation de l'Ontario Science Centre est nécessairement limitée aux principes dentaires fondamentaux. Les deux démonstrateurs font voir des modèles des dents temporaires et des dents permanentes. Ils expliquent ce qu'est la plaque et pourquoi il importe de se brosser les dents et d'utiliser la soie floche. Et lorsqu'ils le peuvent, ils distribuent de la gomme sans sucre, des produits nettoyants pour les dentiers ainsi que des brosses à dents fournies gracieusement par des fabricants.

Les démonstrateurs abordent également d'autres sujets comme les bienfaits d'un bon régime alimentaire, la façon de se protéger la bouche avec un bon protecteur buccal approuvé par l'ACNOR et la manière de lire les étiquettes sur les emballages pour savoir combien de sucre contiennent les aliments.

En offrant une présentation sur la dentisterie de façon permanente, le centre scientifique espère que le public sera mieux renseigné sur les maladies dentaires. Pour leur part, Mme Jarvalt et son collègue, M. Sweeney, savent que la prévention est la clef des problèmes dentaires. C'est le message qu'ils désirent par-dessus tout répandre parmi les gens qui leur rendront visite.

En bref —

En 1980, le coût des programmes dentaires au Québec atteignait 95 915 651 \$, ce qui constitue une augmentation de 26,4 pour cent par rapport à l'année précédente.

Le programme dentaire pour les enfants passait de 62 711 447 \$ en 1979 à 76 152 447 \$ en 1980 pour une augmentation de 21,4 pour cent. Cette augmentation est due au fait que l'admissibilité au programme a été repoussée à l'âge de 15 ans, à une plus grande participation et à une majoration des frais en septembre 1980.

Le programme des bénéficiaires de l'aide sociale représente environ 17 pour cent du coût total des services dentaires en 1980. De 1979 à 1980, ce coût est passé de 10 058 320 \$ à 16 131 025 \$. Cette augmentation est principalement due au plus grand nombre de participants. De plus, les frais ont été majorés en septembre 1980 et les participants ont demandé plus de services.

Le programme de chirurgie buccale n'a guère changé depuis le début. En 1980, le coût en était de 13 453 585 \$, ce qui constitue 3,6 pour cent du coût total des programmes dentaires.

La Fondation canadienne des maladies du rein demande au dentiste de traiter tout patient exigeant la dialyse comme s'il souffrait d'une hépatite. Autrement dit, le dentiste doit porter des vêtements protecteurs, stériliser ses instruments, prendre des précautions spéciales avec les radiographies et imposer des règles d'hygiène à son personnel. On peut se procurer un dépliant intitulé: *"The Dialysis Patient: An Informative Guide for the Dentist"* en écrivant au siège social de la Fondation, 1650, boulevard de Maisonneuve ouest, pièce 400, Montréal Québec, H3H 2P3. Le dépliant est disponible en anglais seulement.

Les CDSPI viennent de publier un nouveau guide à l'intention des diplômés

dentaires pour les aider à planifier leurs assurances.

Il s'agit d'une brochure qui éclaire le problème des assurances en indiquant les risques à couvrir, le montant d'assurance à prendre, la façon de trouver la police la moins chère qui répond aux besoins ainsi que les endroits où s'adresser pour obtenir des conseils.

Le guide est disponible en français et on peut l'obtenir gratuitement en téléphonant aux CDSPI (1-800-268-3792). Il a déjà été envoyé à tous les étudiants canadiens qui recevront un diplôme dentaire cette année et il est accompagné d'une demande d'assurance gratuite pour les diplômés.

Le Fonds canadien pour l'enseignement dentaire accepte maintenant les demandes de bourse.

Le FCED offre une bourse à un professeur de médecine dentaire ayant une expérience universitaire d'au moins cinq ans. La bourse est une gracieuseté de la firme Warner-Lambert Canada Inc. et est d'une valeur de 2 000 \$.

Plusieurs bourses seront décernées aux candidats qui préparent une carrière de chercheur ou d'enseignant dans une école canadienne de dentisterie ou d'hygiène dentaire.

Pour de plus amples renseignements, on s'adressera au doyen d'une école dentaire ou au FCED, pièce 205, 44 Eglinton Avenue West, Toronto, Ontario, M4R 1A1. Les noms des récipiendaires seront annoncés en mai.

Deux fois plus d'enfants que de gens âgés visitent le dentiste une fois par deux ans, révèle une étude effectuée par le gouvernement américain.

Suivant le Centre national des statistiques en matière de santé, seulement 40 pour cent des vieillards ont visité le dentiste dans les deux années qui ont précédé l'enquête sur la santé.

Publié à la fin de l'année dernière, le rapport indique que les caries et les maladies parodontaires sont les deux facteurs principaux qui contribuent à une pauvre santé buccale. La moitié

des gens âgés de 65 à 74 ans n'ont plus de dents.

Même si un vaccin pour prévenir la carie est mis au point, les gens devront continuer à visiter le dentiste.

Bien qu'un tel vaccin soit sur le point d'être créé (Voir le Journal de l'ADC, no 2, 1982), a déclaré le président de l'Académie américaine de l'histoire de la dentisterie, le Dr Clifton Dummett, le public aura toujours besoin du dentiste. "Aucune découverte scientifique prévisible ne peut éliminer toutes les nombreuses causes de la carie et les autres maladies buccales," a-t-il ajouté.

Au contraire, le Dr Dummett a-t-il conclu, le rôle du dentiste pourra devenir plus considérable, puisqu'il s'occupera de prévention, posera des diagnostics et traitera toutes les maladies buccales. Le dentiste verra son patient comme une entité et "songera à la santé du corps entier."

Récemment, le Secrétaire d'État, M. Gerald Regan, déposait un rapport à la Chambre des Communes.

Ce rapport constitue la réponse du gouvernement fédéral aux recommandations d'un autre rapport qui définissait les problèmes des handicapés. M. Regan se propose également de présenter aux Communes un plan d'opération touchant les autres initiatives du gouvernement fédéral.

Pour sa part, l'Association dentaire canadienne a présenté un rapport au Comité spécial pour les handicapés, indiquant les besoins dentaires spéciaux de ceux-ci. De plus, l'ADC a proposé que soit formé un comité national qui recommanderait des solutions pour que les handicapés aient accès aux soins médicaux et soient traités de façon équitable.

Le Dr Joe Edelson est président de l'Académie canadienne d'endodontie. Les autres membres du Conseil exécutif sont: le Dr Bruce Burns, président sortant; le Dr Michael Sherman, président élu; le Dr Marshall Peikoff, trésorier; et le Dr John Phillips, secrétaire.

La recherche dentaire au Canada

L'Association internationale de recherche dentaire a pour but de promouvoir la recherche en médecine dentaire sous tous ses aspects et compte actuellement plus de 5 500 membres dans le monde. Division de l'organisme international, l'Association canadienne de recherche dentaire ne compte que 150 membres, mais plusieurs d'entre eux se sont mérité des distinctions de l'AIIRD pour la haute qualité de leur recherche et deux ont récemment accédé à la présidence de l'organisme, le Dr G.S. Beagrie, de Vancouver, en 1977-1978, et le Dr A.H. Melcher, de Toronto, en 1982-1983. C'est dire toute la renommée qu'à la recherche dentaire canadienne sur le plan international.

De fait, au Canada, où il n'y a pas d'instituts de recherche spécialisés en médecine dentaire comme aux États-Unis, ce sont les universitaires des dix facultés de médecine dentaire qui font toute la recherche dans le domaine.

Une étude, menée récemment par l'Association des facultés de médecine dentaire du Canada, a indiqué qu'en 1980-1981, des organismes étrangers y avaient financé pas moins de 95 projets de recherche différents. Plusieurs autres projets ont reçu des fonds fournis par les universités elles-mêmes ou puisés à la somme de 15 000 \$ que le Conseil de la recherche médicale remet annuellement au doyen de chaque faculté de médecine dentaire à des fins de recherche.

Les projets sont extrêmement variés. Entre les études sur la mauvaise haleine, sur la côte ouest, et la recherche sur les matériaux dentaires, sur la côte est, les chercheurs se penchent sur presque tous les aspects des maladies dentaires. La plupart des travaux relèvent cependant de la recherche fondamentale et il est malheureux de compter si peu de projets cliniques en cours. Il est regrettable aussi de voir que les écoles d'hygiène dentaire ne semblent

pas participer, en aucune façon, aux travaux.

Le Canada est particulièrement avancé dans au moins trois secteurs de la recherche dentaire. D'abord, en périodontie, dont le gros des travaux est mené, à l'Université de Toronto, par le groupe de physiologie parodontale que dirige le Dr A.H. Melcher. Des neuf groupes spéciaux de recherche, c'est le seul qui est financé par le Conseil de la recherche médicale. Il comprend cinq universitaires qui travaillent à plein temps au projet, auquel collaborent un certain nombre de techniciens, des boursiers qui ont leur doctorat et des étudiants diplômés.

Le groupe examine de façon particulière la structure et la transformation du collagène dans le ligament parodontal, les facteurs qui régissent le remodelage de l'os alvéolaire et les cellules qui jouent un rôle dans le développement du ligament parodontal. Ces travaux devraient avoir une grande portée dans le traitement de la périodontite.

La microbiologie buccale est un autre secteur où la compétence canadienne est reconnue internationalement. Des travaux fort intéressants se poursuivent à l'université du Manitoba, à Toronto, à Laval et à l'université de Colombie-Britannique en ce qui a trait au développement et au métabolisme de la plaque dentaire ainsi qu'à l'écologie microbienne de la cavité buccale. Ces études devraient avoir une portée sur les maladies reliées à la plaque, telles la carie, la périodontite et la mauvaise haleine.

Le troisième champ de recherche important, dont les travaux se poursuivent notamment aux universités de Montréal, de Toronto et de Colombie-Britannique, porte sur la neuro-physiologie de la mastication et de l'ingurgitation. Ces études permettront de mieux comprendre les troubles du joint temporo-mandibulaire et divers problèmes d'orthodontie.

Les autres grands projets de recherche portent sur le tissu cellulaire, le développement cranio-facial, la salive, les matériaux dentaires, la formation des dents et l'épidémiologie des maladies dentaires.

À l'échelle mondiale, l'efficacité de la recherche a permis particulièrement de mettre au point des moyens de combattre la principale maladie dentaire, la carie. Le facteur le plus important a été l'utilisation du fluorure sous toutes ses formes et le Canada a participé aux études sur la question.

La réussite de la recherche en ce domaine se voit à la diminution de la prévalence de la carie dentaire. À l'avenir, les dentistes de la pratique générale pourront probablement se concentrer davantage sur la périodontite et consacrer plus de temps à des traitements administrés actuellement par les spécialistes seulement.

En 1980-1981, les sommes affectées à la recherche dentaire au Canada ont atteint environ 3,1 millions de dollars, dont 57 p. 100 provenaient du Conseil de la recherche médicale.

Celui-ci veille au financement de la recherche en dentisterie, en médecine et en pharmacie. Il subventionne directement les chercheurs des universités et finance divers programmes de formation en recherche.

Les subventions sont accordées après examen par un groupe de spécialistes du domaine et la plupart des demandes présentées par les écoles dentaires sont examinées par le comité des sciences dentaires du conseil. Composé de chercheurs des diverses régions du pays, ce comité fait partie des 21 comités qui couvrent tous les aspects de la recherche en matière de santé.

Les comités se réunissent une fois l'an. Après en avoir examiné les références, ils évaluent toutes les demandes à leur mérite scientifique et recommandent le budget approprié.

Les demandes de tous les secteurs sont ensuite mises en commun par ordre d'évaluation. Les demandes du secteur dentaire viennent ainsi en concurrence directe avec celles des autres secteurs et reçoivent des fonds en fonction de l'évaluation jusqu'à ce que les sommes soient épuisées. Il n'est donc pas surprenant que cela se produise avant qu'on puisse financer tous les projets méritoires.

Tout récemment, certaines provinces ont établi leur propre fonds de recherche dans le domaine de la santé et fait d'importantes contributions à la recherche dentaire. C'est le cas de la Colombie-Britannique, de l'Ontario et du Québec.

Le fonds du patrimoine de l'Alberta devrait, à l'avenir, apporter une importante contribution à la recherche dentaire dans cette province et on peut s'attendre à des contributions moindres des fonds beaucoup plus restreints de la Saskatchewan et du Manitoba. Actuellement, la faculté de médecine dentaire de Dalhousie est la seule qui n'ait pas accès à un fonds de recherche provincial.

Le besoin de recherches fondamentales pour étudier les maladies dentaires sous tous leurs aspects se fait toujours sentir. À titre d'exemple, la mise au point d'un meilleur ciment d'obturation, plus sûr que les ciments actuels et applicable aux parties rapprochées des dents, pourrait, à elle seule, révolutionner le traitement de la carie. De même, la mise au point d'un agent contre le calcul faciliterait grandement le travail de l'hygiéniste dentaire.

Les études de ce genre devraient continuer de recevoir l'appui des sources établies, et il est probable qu'il en soit ainsi, mais il est difficile de prévoir que les fonds mis à la disposition de la recherche fondamentale augmenteront de beaucoup.

Dans le passé, la médecine dentaire a trop misé sur les fonds du Conseil de

la recherche médicale et il fait plaisir de voir se créer d'autres sources de financement. Le conseil continuera cependant de jouer dans le financement de la recherche dentaire un rôle beaucoup plus grand que dans celui de la recherche médicale. Comme peu de gens meurent de troubles dentaires, il n'y a pas de sources de financement comparables aux fondations de recherche sur le cœur, le diabète, la fibrose kystique et autres, qui jouent un rôle si grand dans le financement de la recherche médicale.

L'avancement de la recherche dentaire devra donc compter sur d'autres sources de financement. La médecine dentaire dans le domaine de la santé publique est un secteur négligé de la recherche qui ne semble pas recevoir de fonds d'organismes comme le ministère fédéral de la Santé et du Bien-être.

Certes, il y a des fonds pour faire certains travaux, telles l'analyse coût-efficacité des divers procédés de prévention dentaire et la mise au point des moyens les plus efficaces pour promouvoir la santé buccale chez la population. Mais, s'il n'y a pas suffisamment de chercheurs pour faire des études cliniques au Canada et dans le monde, ce genre de recherche a quand même une importance économique énorme et les universités devraient commencer à former plus de chercheurs de cette catégorie. C'est, en partie, à cause de ce manque que les résultats de la recherche fondamentale, sur des questions comme la reminéralisation des jeunes caries, prennent tant de temps à passer du laboratoire au cabinet de pratique générale.

Ce n'est que tout récemment et de façon très limitée, que la médecine dentaire a commencé à s'intéresser aux besoins collectifs de santé buccale dans la société, compte tenu d'autres désordres particuliers, tels la fibrose kystique, le diabète et les handicaps

physiques et mentaux. Plusieurs agences spécialisées imposent cette condition pour appuyer la recherche et il semblerait y avoir de grandes possibilités d'obtenir des fonds pour la recherche sur les besoins de santé buccale des populations compte tenu des autres problèmes médicaux.

Les dentistes qui désirent faire carrière dans l'enseignement et la recherche ont d'excellentes possibilités de se former. Plusieurs universités canadiennes offrent des programmes bien établis de formation en recherche dentaire aux niveaux de la maîtrise ou du doctorat. L'Université du Manitoba, par exemple, a été la première à offrir un doctorat en biologie buccale.

On peut souvent joindre ces études à des programmes de spécialisation annoncés régulièrement dans le Journal dentaire canadien. Le programme combiné, doctorat et spécialisation, durerait environ cinq ans et pourrait faire l'objet d'un appui financier d'organismes tel le Conseil de la recherche médicale qui accorde, pour 1982-1983, des bourses variant entre 2 000 \$ et 3 200 \$ par année, selon le nombre d'années écoulées après l'obtention du DDS ou du DMD. Le conseil accorde aussi une subvention spéciale pour la formation en recherche dentaire à l'Université de Toronto qui offre un programme combiné d'études en science de base et en spécialisation clinique. L'octroi permet d'accueillir deux nouveaux étudiants par année.

Le Fonds canadien pour l'enseignement dentaire a aussi joué un rôle important dans la formation du personnel enseignant des facultés de médecine dentaire. Actuellement, il s'intéresse tout particulièrement à l'étude des besoins en main-d'oeuvre dentaire.

Un des grands problèmes actuels, c'est d'orienter les dentistes vers la recherche, le cabinet de pratique offrant dans l'immédiat des avantages pécuniaires supérieurs. Beaucoup d'étu-

dians sont endettés une fois leurs études terminées et, alors, la pratique offre sur le plan financier un attrait presque irrésistible.

Seulement deux pour cent environ des diplômés en médecine dentaire demandent des bourses de formation en recherche dans les quatre années suivant l'obtention de leur diplôme, comparativement à six pour cent pour les diplômés en médecine. De fait, il y avait en 1979-1980 moins de cliniciens et de scientifiques en dentisterie qu'il y en avait en 1970.

Le nombre des chercheurs en médecine dentaire a augmenté quelque peu au cours des dernières années, surtout parce que les scientifiques possédant un Ph. D. ont été attirés par le domaine. Toutefois, si l'on croit de plus en plus que les agglomérations urbaines du Canada ont suffisamment de dentistes de pratique générale, du moins pour répondre aux besoins de la population qui fait appel aux services régulièrement, la situation peut s'améliorer, les meilleurs parmi les jeunes dentistes se voyant ainsi encouragés à envisager une carrière académique.

Les restrictions financières des écoles dentaires engendrent cependant un autre grand problème, celui des cliniciens surchargés par des tâches d'enseignement. Le problème se pose souvent dès le début de leur carrière, avant même qu'ils n'aient eu l'occasion de définir un programme de recherche viable.

Les cliniciens dentaires semblent avoir, en général, une tâche d'enseignement plus lourde que leurs collègues de la médecine; c'est un problème qui mérite toute l'attention des universités. Les dernières statistiques montrent que seulement 9,2 p. 100 des cliniciens dentaires ont des subventions de recherche par rapport à 35,6 p. 100 pour ceux des facultés de médecine. Il y a donc un grand besoin de

professeurs dans le domaine de la recherche, notamment pour les jeunes scientifiques et cliniciens, qui pourront ainsi y consacrer le gros de leurs efforts.

Un autre facteur empêche les jeunes diplômés de s'orienter vers la recherche et la spécialisation. C'est le manque de résidences dans les secteurs cliniques autres que la chirurgie buccale. S'il y en a quelques unes pour la formation en recherche, il n'y a aucune bourse pour la spécialisation, et les diplômés de médecine dentaire doivent souvent être prêts à financer eux-mêmes leur spécialisation.

Contrairement à la médecine, les cliniques des écoles dentaires font partie de l'université et tous les honoraires versés par les patients vont à l'université. En conséquence, le secteur dentaire ne dispose d'aucun revenu pour aider financièrement ses stagiaires de la clinique comme cela se fait dans les hôpitaux.

En résumé, la recherche dentaire canadienne est en général de qualité supérieure en ce qui a trait à la science fondamentale, mais relativement faible quant à la recherche clinique qui, pour bien des raisons, accuse un manque aigu de chercheurs.

Le financement de la recherche augmente lentement et offre d'excellentes perspectives d'expansion, notamment pour la recherche clinique. Plusieurs universités offrent de bons programmes de formation en recherche et, malgré le besoin de subventions, la recherche et l'enseignement dentaires peuvent offrir aux dentistes comme aux scientifiques une carrière des plus intéressantes et stimulantes.

par le Dr. C. Dawes,
Professeur de biologie buccale,
Faculté de dentisterie,
Université du Manitoba.

"Marathon de la molaire" à Kingston, le 25 avril

La *Kingston and District Dental Society* encourage les gens à se garder en forme et participe au Mois national de la santé dentaire d'une façon fort originale.

Dimanche, le 25 avril, la société tiendra un "molar-thon" (marathon de la molaire) pour "couronner" les activités de la Semaine de la santé dentaire qui aura débuté le 19 avril.

Enfants et adultes sont invités à y prendre part. Il s'agit de deux courses. La première est une course d'un mille et s'adresse aux enfants. Elle commencera à 10h30. La deuxième est de cinq milles et commencera à 11 heures.

La première course est gratuite, mais les frais d'inscription pour la deuxième sont de 5\$ par personne ou de 10\$ par famille avant le 25 avril, de 6\$ par personne ou de 12\$ par famille le jour même de la course. L'inscription peut se faire au gymnase du Collège St. Lawrence, à Kingston, de 8h30 à 10h30.

On a établi onze catégories pour dames et hommes de 15 ans ou moins, de 16 à 19 ans, de 20 à 29 ans, de 30 à 39 ans, de 40 à 49 ans (hommes), de 40 ans ou plus (dames) et de 50 ans ou plus (hommes). Des trophées seront décernés aux meilleurs coureurs des deux sexes, tandis que des médailles seront distribuées aux trois meilleurs coureurs de chaque catégorie.

Pour d'autres renseignements, veuillez communiquer avec Deborah Steacy au (613) 542 1164, après 20 heures, ou écrire au Molar-thon '82, C.P. 561, Kingston (Ontario) K7L 4W5.

Complete Handbook for Dental Auxiliaries

Charles A. Reap, Jr.

149 pages, Quintessence Publishing.

This is a text designed to reinforce auxiliary skills presently being utilized and provide suggestions to help all members of the Dental Health Team obtain a higher degree of knowledge and skills in order to improve practice efficiency.

The book is divided into four sections. The Secretarial Assistant, The Chairside Assistant, The Dental Hygienist and Administration of the Dental Office.

The Secretarial Assistant is provided with suggestions for accuracy and efficiency in running the paperwork of the office. There are tips for handling patients in person and by telephone and ways to make patient flow smooth and non-stressing. There is some ex-

cellent information on income tax and auditing as well as a review of recordkeeping. This section concludes with establishment of a shared case presentation to the patient by the dentist and the secretarial assistant.

The Chairside Assistant section discusses the importance of teamwork and communication and gives ways to evaluate the work environment and how to resolve differences.

Suggestions are made for more effective patient control leaving the patient with a positive attitude.

A review of the office set-up and the arrangement of instruments and equipment to obtain maximum efficiency for all treatment procedures, and a check on four-handed dentistry is next.

The last two areas discuss the importance of equipment and instrument maintenance and the

responsibilities of the assistant in the laboratory.

The Dental Hygienist section reviews scaling and root planing procedures as well as patient education and patient relations.

The final section discussed the function and benefit of having an office manual and how to develop and maintain one. Treatment of salespersons, children requiring entertainment during treatment and ways to fill time while the doctor is away are presented.

The text concludes with the importance of regular staff conferences.

This book is easy to read and has lots of pictures and illustrations. I would recommend it as a good review for auxiliaries who have been in practice for some time.

This review was prepared by Barbara Peterson, President, C.D.N.A.A.

Diet, Nutrition and Dentistry

*Patricia M. Randolph
Carol I. Denison*

The C.V. Mosby Company, St. Louis, 1980.

358 pages (\$19.25 CAN.)

This is a well-illustrated book on Diet, Nutrition and Dentistry written by an Associate Professor in Biochemistry-Nutrition and a dentist in private practice.

The book is divided into two sections. The first section consists of six chapters which supply information on the principles of nutrition including chapters on energy-producing nutrients, energy requirements and utilization.

The second section consists of 13 chapters dealing with the specific area of dietary and nutritional implications pertaining to the dental patient. Included are chapters

on behavior modification, diet and nutritional counselling for dental patients and the application of this information to a dental practice setting. A complete case study followed by questions concludes each chapter to illustrate the application of nutritional counselling to dentistry.

The most applicable chapter for the dental profession is on "Diet and nutrition counselling in dental practice." It deals thoroughly with the rationale, art and science of diet and nutrition counselling.

The book also deals well with the needs and priorities of individual patients with specific needs. For example: the caries-rampant patient, the periodontal patient, the pregnant and lactating patient, the post-surgery patient and the cancer patient. It also provides reference to additional resource

material on all the topics discussed.

One other well-illustrated and applicable chapter to dentistry is the one on controversies regarding food and nutrition. This chapter provides the practitioner with an evaluation on dietary selection patterns that influence nutritional status — especially specific diets that may alter food selection patterns and be injurious to the patient's health.

Over-all, the book progresses logically from basic biochemical facts with scientifically sound and relevant information to a clinical dental practice setting. Thus, as a reference resource this book makes a useful contribution to one's library.

This book was reviewed by Linda Strevens, Dip. Dental Hygiene, BscD., Dept. of Preventive Dentistry, Univ. Toronto.

ORTHODONTICS: PAST, PRESENT AND FUTURE?

"Dr. Webster was in charge of the Infirmary** in 1897 and brought a boy about fifteen years of age to me and asked if I would undertake an Orthodontic case. We had no instruction in it and I objected but when he offered to assist me, I agreed... I am sure this was the first Orthodontia done in the R.C.D.S.***... We had a Dr. S.A. Roberts in our 1897 year who had graduated in the United States and wanted to come back to practise in Toronto. He had a general practice for two or three years and then specialized in Orthodontia. He may not have been the first specialist but he must have been very close to it."*¹

These were the words of George T. Kennedy, centenarian, speaking in 1975, during the Centennial of Dental Education in Canada. Dr. Kennedy was born on September 21, 1875; graduated from the R.C.D.S. in 1897 and practised in St. Thomas Ontario for an unbelievable 65 years prior to his death on November 16, 1976, at the age of 101.

S.A. Roberts was, indeed.

*"the first dentist in the Dominion to enter exclusive practice in 1904."*²

In fact, Dr. Roberts would have been the first and only Canadian to ever become President of the American Association of Orthodontists if it were not for his untimely death in 1907. Instead, his partner, Guy Hume, a graduate

of the Angle School of 1906 was so honoured in 1914.

Other pioneers in Canadian Orthodontics included George W. Grieve, of Toronto, and James A.C. Hoggan of Hamilton, both graduates of the Angle School of 1907. Charles A. Corrigan of Toronto was also a member of the 1907 class but he did not specialize until later. Charles H. Juvet brought the specialty to Ottawa, James B. Morrison to Montreal, Manley Bowles and B.E. Brownlee to Winnipeg and W.J. Lea to Vancouver. William W. Woodbury of Halifax, was the first specialist to practise in the Maritime Provinces and he was the first teacher of the speciality in the country. He was professor of Orthodontia at the Maritime Dental College from 1908 to 1912 and at the Faculty of Dentistry, Dalhousie University from 1912 to 1952. He had a family background in the specialty. His father, Hibbert Woodbury, a founder of the Maritime Dental College, wrote his thesis on 'Orthodontia' upon graduating from the Philadelphia Dental College in 1877. Frank Woodbury, his uncle, was the first dean of the Maritime Dental College, 1908 to 1912, and the first dean of the Faculty of Dentistry, Dalhousie University, 1912 to 1922, the fourth Dental College in Canada.

Other stalwarts in the early years included Alonzo McClelland, Gerald Franklin, Maurice Donigan, Paul Geoffrion, Sidney Bradley, Vernon Fisk, Stuart Crouch, Harvey Bean, Angus Kennedy and Reyburn McIntyre. It is a coincidence that I have been invited to write this editorial in the same year that the Canadian Association of Orthodontists is dedicating its annual meeting to its Founder and first President, Reyburn R. McIntyre of Edmonton Alberta — the association was established in 1950. During this same historic meeting, which will be

* Dr. Albert E. Webster, second dean of the R.C.D.S., 1915-1923.

** Infirmary of the R.C.D.S., 93 College St., Toronto, fourth location, site of the present Toronto General Hospital.

*** R.C.D.S., Royal College of Dental Surgeons, Toronto, established November 3, 1875, the first Dental College in Canada. James B. Willmott, first dean, 1875-1915.

held in Toronto, May 7-9, The Canadian Foundation for the Advancement of Orthodontics will be officially established and the first McIntyre Memorial Lecture, the first project sponsored by the Foundation, will be delivered by its first President, Rowland D. Haryett. Vernon Fisk and Paul Geoffrion, two outstanding Canadian Orthodontists, recently deceased, will be honoured by the Foundation. The Grieve Memorial Lecture will be delivered by a most deserving Canadian orthodontic research scientist, clinician, teacher, author, administrator, and diplomat, Arthur Storey of Winnipeg. The first Grieve Memorial Lecture was given by Spencor R. Atkinson in 1952. Dr. Fisk gave it in 1953, Dr. McIntyre in 1954, Dr. Geoffrion in 1959 and Dr. Haryett in 1978. George Wellington Grieve, in my opinion, has been the dominating figure in Canadian Orthodontics since its inception. Even today, he is still recognized internationally as one of the most influential and illustrious personalities of the early years.

On May 27, 1944, Edgar W. Paul, Chairman of the Committee on Legislation, submitted his report to the Board of Directors of the R.C.D.S. of Ontario. It included a "By-Law to Regulate Specialists and Specialization". It was the first legislation in Canada to establish Orthodontics as a specialty. The following year, the first Specialists' Register appeared in the R.C.D.S. reports and it included sixteen orthodontists: F.J. Furlong, Windsor; S.A. Moore, London; W.G. Foster, Hamilton; H.C. Bliss, C.A. Corrigan, Marg. I. Cowan, S.S. Crouch, M.R. Culbert, G.V. Fisk, Holly Halderson, H.E. Leslie, M.L. Simon and Saul Simon, Toronto; S.W. Bradley, Braithwaite Dixon and C.H. Juvet, Ottawa.⁴ Thus, Margaret Cowan became the first woman to be certified as an orthodontist in Canada. In 1946, Vernon Fisk established and directed the first graduate course in orthodontics in Canada at the Faculty of Dentistry, University of Toronto. The course was designed to prepare dental graduates to qualify for certification as a specialist. One graduate registered, the first graduate student in Orthodontics and the first Dentist to receive a diploma in orthodontics from a Canadian University. The Dentist was Edward E. Johns of Kingston Ontario.⁵ In 1947, Paul Geoffrion established a similar programme at the University of Montreal.

Today, each of the ten dental colleges throughout Canada offers a course in orthodontics to undergraduate students. Five universities provide graduate education in the specialty: Alberta, Manitoba, Toronto, Western Ontario and Montreal. There are, at present, 398 certified specialists in the country. However, malocclusions are being treated, in ever increasing numbers, by other members of the Dental profession, the practice of dentistry is

changing and the delivery of orthodontic care is experiencing, hopefully, an evolution and not a revolution. Advances in dental science and preventive procedures have markedly reduced the incidence of caries and the loss of teeth while the rapid increase in education and utilization of auxiliaries have relieved the dentist of traditional duties. In many instances, it has kindled a raw fear of job insecurity. According to Edward Bilkey this is,

*"evidenced by apparently desperate enthusiasm on the part of some practitioners to undertake a much greater variety of services. When this enlargement of scope and interest goes hand in hand with professional competence everyone could benefit. However, if financial insecurity resulting from dental overpopulation were to drive inadequately trained persons to fresh pastures, the risks to the public could be unfortunate."*⁶

It is not so important who provides the treatment but, it is important that a concerted effort be made to prepare oneself for the responsibility that one is undertaking. A thorough knowledge of the basic principals of diagnosis and treatment planning is essential. It is not enough to take a short course here and a short course there on specific treatment procedures. Short courses are designed, primarily, for what their title implies "continuing" education. A practitioner, before he attempts the treatment of an orthodontic patient, must be prepared to meet the challenges of (1) Diagnosis, (2) Patient co-operation and (3) Treatment Techniques. Without question, the "secret of success" in Orthodontic treatment is a thorough understanding of diagnosis. One can have the most sophisticated orthodontic appliance in a patient's mouth but if it is in the wrong patient treatment will fail. Similarly, one can be the best orthodontist in the world but if the patient is not co-operating treatment will end in failure. The personal aspect including patient behaviour and motivation, is the most interesting and demanding task that one experiences in the daily routine of practice. The third and least important factor is the selection of the orthodontic appliance — there are many to choose from. These remarks are intended for the practitioner who may be inadequately prepared, albeit unknowingly, and who is contemplating the treatment of major malocclusions by the use of "miracle" appliances. In my opinion, none exist and such use of these appliances may injure the patient, subsequently the reputation of the practitioner and ultimately our profession.

Orthodontics is, and has been, plagued with recurrent trends and needless controversies. At present, practitioners in Canada and the United States are mesmerized

by the explosion of "the new" functional appliances, accompanied by non-extraction treatment. Multibanded edgewise appliances and the extraction of teeth are "out of favour". In Europe, especially in the countries where I have lectured, the trend is to precision tooth movement, multibanded edgewise mechanotherapy and the judicious extraction of teeth. This is very interesting, because functional appliances originated in Europe and have been utilized by orthodontists there for seventy-five years. Since 1900, the date arbitrarily selected as the beginning of the oldest specialty in dentistry, the year Edward H. Angle established his school of orthodontia in St. Louis, we have suffered through countless trends and controversies. There is absolutely no reason to believe that this situation will not continue to exist into the future.

There is nothing wrong with the investigation of a new trend as long as it is kept in its proper perspective by individual practitioners. A young dentist, who aspires to the treatment of orthodontic patients would be wise to avoid becoming totally engulfed by trends and torn apart by fleeting controversies. He should make every effort to obtain the best possible and most complete education available in this special field of dentistry for it is a special field and it demands a special knowledge. If a sound diagnosis indicates the use of a functional appliance use it. If a multibanded appliance is required, then use it. No single philosophy of treatment is a panacea for the correction of all malocclusions. If I was required to treat all my patients without the extraction of teeth I would seek another vocation. However, if my diagnosis indicated that the malocclusion would be better treated without the extraction of teeth that is the treatment plan that I would pursue. Throughout my career I have strived to adhere, in general, to the philosophy of Charles H. Tweed:

*The Tweed Philosophy is an orthodontic concept defined as a search for the Truth and a quest for Excellence. It is characterized by Honesty with ourselves, our colleagues and with our patients.*⁷

Shakespeare puts it another way:

*"This above all: to thine own self be true,
And it must follow, as the night the day,
Thou canst not then be false to any man."*

— Polonius to Laertes, Laertes, Act I, Scene 3.⁶

Put yet another way:

*"If you cannot help your patients . . . then do not hurt them."*⁸

The future of the specialty of orthodontics in Canada, I feel, is in the hands of licensing bodies of each province. So much depends on the courage, the wisdom and the un-

biased integrity of each individual board member in arriving at an objective and just judgement in respect to the practice of the specialty of orthodontics.

The future of orthodontic treatment in Canada is in the hands of our young graduates. The rewarding and exhilarating experiences that I have shared with dental students during the past twenty years enable me to take great delight in what is in store for the future. I am proud of our young graduates and I am proud of young people in general. Their efforts and triumphs help us forget the many unpleasant aspects of today's world. George Gross of the Toronto Sun said in his column recently:

*"Wayne Gretzky, the 20 years old superstar of the Edmonton Oilers is merely one of a large group of Canadians who epitomize everything that is good about our young people. They show us that in spite of what some critics would lead us to believe, the vast majority of youngsters are examples of decency and dedication, excellence and modesty — and the future is in the very best of hands."*⁹

And so it is with the young men and women who will inherit our profession and the specialty of orthodontics.

Jack G. Dale

*President, Canadian Association of Orthodontics,
President-Elect, Canadian Foundation for the
Advancement of Orthodontics,
President, The Charles H. Tweed International
Foundation for Orthodontic Research.*

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Successful Management of Removable Orthodontic Appliance Therapy

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ABSTRACT

The successful treatment of a malocclusion with an active removable appliance necessitates both careful motivation of the patient and manipulation of the appliance. As this aspect of management has been somewhat neglected in the dental literature, guidance is offered on these topics.

Within the last 10 years, an increasing interest has been shown in the use of active removable orthodontic appliances and many general practitioners are now offering this treatment to their patients.

Several textbooks are available, mainly by European authors,¹⁻⁶ describing both the recognition of cases amenable to treatment and the design of removable appliances. However, little documentary information is available to guide practitioners in the clinical management of the actual course of treatment. It is the purpose of this paper to meet this deficiency.

Emphasis will be placed upon patient and appliance management, and design will only be touched upon when relevant to the above aim. The versatility of removable appliances is much less than that of banded appliances but attention to detail is no less important.

PRELIMINARY REQUIREMENTS

It is essential that all of the following points be understood by the patient and parent before appliance therapy is commenced.

1. Oral hygiene and general dental care

The fitting of any orthodontic appliance will obviously cause an increase in food impaction and unless the patient is prepared to maintain a high standard of oral hygiene, caries or at least enamel decalcification and gingivitis, will

probably occur. A willingness to undergo routine dental measures is a prerequisite to active orthodontic treatment.

2. Appreciation of the need for treatment and what it entails.

For many patients and parents, the malocclusion is readily perceived and the benefits of treatment will be obvious. In some cases, an explanation will be necessary, and this can be made more convincing if backed up by photographs or models of orthodontic patients with similar problems.

One specific problem occurs with the parent who is enthusiastic for treatment but the child is reluctant. In spite of parental assurance that treatment will be closely supervised, it is a fact that for large periods during the day the child will be out of the parent's control, and unless he/she is sufficiently motivated, the appliance may well be in the pocket rather than the mouth!

The patient should be made aware of the likely duration of treatment, since too optimistic an estimate only produces frustration and lack of cooperation in the final stages. If it is assumed that teeth move at the rate of about 1 mm per month, an approximate estimate time can be provided. The retention period subsequent to active tooth movement should also be mentioned since this is often overlooked.

Esthetics are obviously important to children and it is necessary to ensure that the patient fully appreciates what the appliance will look like. Use of photographs and models are once again of assistance.

Although removable appliances may be less unsightly than fixed appliances, nevertheless, it is sometimes necessary to show wire around the front teeth. When designing the appliance, it should be remembered that some designs are less noticeable than others — and these should be used, if possible.

It is essential that before embarking upon removable appliance therapy, the patient appreciates that in most instances full-time wear is mandatory. Emphasis should be put on the importance of wear during eating, particularly if anterior and posterior bite planers are incorporated in the design.

3. Patient Age

Removable appliances are of variable complexity and in many cases patients' chronological age bears no relation to their mental capacity or manual dexterity. It is a mistake to fit too complicated an appliance in a patient who is unable to carry out the necessary instructions. Reliance upon parental fitting and adjustment has proved to be most unsatisfactory.

4. Good Impressions

Up-to-date study models, trimmed in such a way that the centric relationship of the upper and lower arches can be checked, are essential before commencing treatment. Models will act as a base against which both advantageous or incorrect tooth movement can be checked. They are also very useful in illustrating progress to both patient and parent.

A good working model upon which the appliance is fabricated depends upon good impressions. When appliances are used in the mixed dentition stage and teeth are in the process of active eruption, any delay between the impression and appliance fitting may mean that acrylic trimming will be necessary. If extractions are part of the treatment plan, it is a good idea to arrange the fitting to coincide with the extractions, otherwise spontaneous tooth movement will interfere with fitting.

APPLIANCE DESIGN

Three cardinal rules to follow in appliance design are simplicity, comfort and good esthetics. Often, for reasons of economy, too many types of tooth movement are attempted with one appliance and the appliance becomes too complex to wear and adjust. The life of removable appliances, in most mouths, does not go beyond six months and if too much is anticipated from one appliance, then final months are often complicated by repeated fractures.

The appliance must be designed to ensure that the retention is adequate to prevent dislodgement, either by gravity or during eating. Adam's cribs on first molars may be all that are necessary, but often additional retention towards the front of the mouth is helpful. A double crib on both central incisors considerably increases retention without greatly detracting from esthetics.

The active component should give an adequate, sustained pressure and not be too difficult to insert or vulnerable to distortion. Finger springs, expansion screws and elastics are frequent components of removable appliances and fulfill the above criteria.

Finally, anchorage should be adequate to resist forces generated by the active component. Careful consideration should be given to involving as many teeth as possible to increase anchorage potential; this can most easily be achieved by the accurate fit of the acrylic baseplate around the palatal or lingual surfaces of teeth.

When anterior and posterior crossbites are to be corrected, and particularly when bites of accommodation exist, the use of biteplanes is very helpful. Mandibular closure on a centric path is possible and the elimination of cuspal interference leads to more rapid tooth movement.

FITTING A REMOVABLE APPLIANCE

Before insertion in the mouth, check the appliance to ensure that the terms of the original prescription have been fulfilled and examine the fitting surface for any sharp edges that might cause discomfort.

The best path of insertion is then determined, and in the case of an upper appliance, it is usually most satisfactory to insert the appliance around the anterior teeth initially and then by the application of pressure in the palate to engage the molar cribs. This should occur with a fairly light force and if the cribs fit correctly, a "soft click" is heard. The path of removal is usually in the reverse order.

Check to ensure that the wire and acrylic components do not cause blanching of soft tissues, that the active components lie passively in contact with the teeth to be moved, and that springs or acrylic do not extend too deep into the sulcus. It is helpful at this time to ask if the patient experiences any discomfort. When listening to the patient's answer to this question, the operator can also evaluate the effect of the appliance upon the patient's speech.

Appliance retention should be checked at this point. This can be determined by attempting to dislodge first one molar crib and then the other by gently pulling down on the bridge of the crib with the forefinger. Some resistance should be felt; if this is deemed excessive, then the arrowheads probably engage the buccal undercuts too deeply; if insufficient resistance is felt then adjustment to increase undercut engagement should be carried out. Correct and incorrect sites of adjustment are illustrated in Figure 1.

If the wire of the crib is adjusted at point A, the arrowhead can be moved either into or out of the undercut area on the disto or mesiobuccal corners of the tooth. Adjustment at point B will cause the interproximal arms to interfere with the contact area between adjacent teeth and it will prove impossible to fully seat the appliance.

BITEPLANES

The use of biteplanes greatly increases the bulk of appliances. They should be kept to an absolute minimal thickness and should be adjusted if necessary at the time of fitting.

Anterior biteplanes, which are used to permit eruption of lower posterior teeth and effectively reduce deep over-

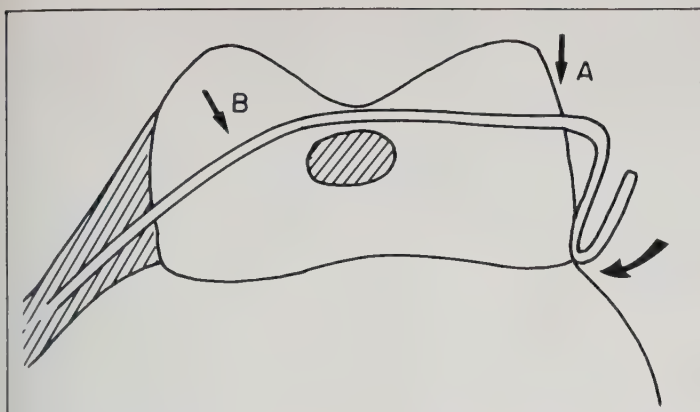


FIG. 1. Correct and incorrect sites of adjustment of an Adam's Crib. The correct site A controls the depth of the arrowhead in the buccal undercut. Adjustment at B will cause either the interproximal arm to be too high and interfere with occlusion or to be too low and interfere with appliance insertion.

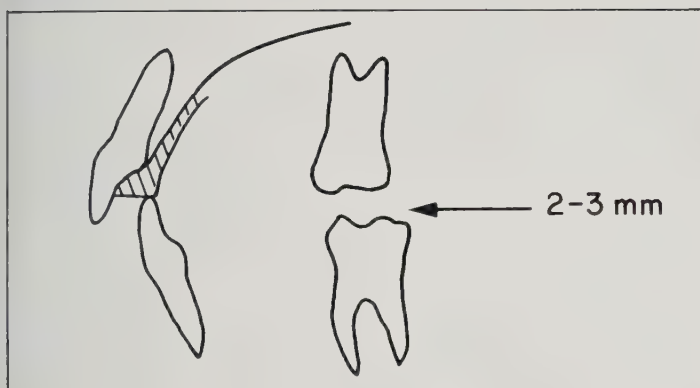


FIG. 2. Correctly constructed flat anterior biteplane. An interocclusal distance of 2-3 mm initially is adequate and the lower incisors should not be able to occlude palatally to the biteplane.

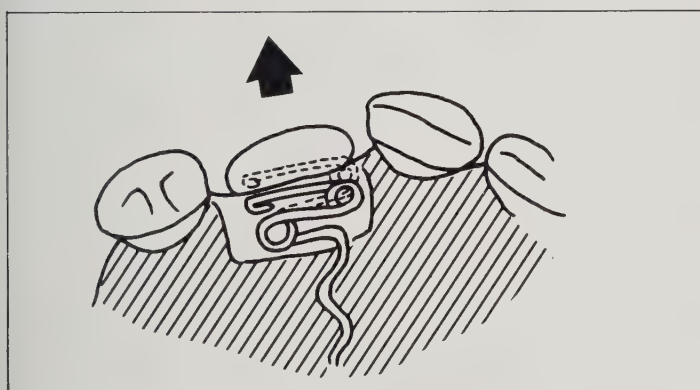


FIG. 3. Activation of a Z spring is by pulling the distal arm forward (dotted line). The arm should be parallel to the tooth to be moved unless a couple is required.

bites, should be checked to ensure that the bite is opened in the molar region by no more than 2-3 mm. The plane should be extended palatally to allow the lower incisors to contact it (Fig 2).

Opening the bite beyond 2-3 mm makes the appliance very uncomfortable and if further opening is required, the thickness can be increased subsequently by the use of cold-cure acrylic at the chairside. Posterior biteplanes should similarly be of minimal thickness to ensure that the occlusion is cleared to relieve mandibular displacement and to aid crossbite correction. Cold-cure acrylic again may be used to increase thickness. A final check should be carried

out to ensure that over-extended acrylic will not interfere with the desired tooth movement.

ACTIVATION

The activation of a removable appliance frequently increases the difficulty of insertion. Consequently, it is often a good idea if the appliance is fitted passively and the patient given a short period of time to establish a familiarity with both insertion and wearing before activation is carried out. Any delay in treatment is minimal and usually worth while.

Springs

Springs are utilized when it is desirable to tip a tooth. For single-rooted teeth, a force of 30-40 g is adequate, although the actual figure will vary with the root area of the tooth to be tipped. Excessive force may result in pain or loss of anchorage.

The degree of activation of a finger spring can be very conveniently checked by making a small mark with a grease pencil on the polished surface of the acrylic when the appliance is in the mouth. On removal from the mouth the amount of deflection of the spring gives a clear indication of activation.

A check should also be made to ensure that the force is applied at right angles to the desired direction of movement to avoid unnecessary buccal, palatal or rotary movement. After some tooth movement has occurred a space will then exist between the tooth and its neighbour; further adjustment can now be made to allow tooth-spring contact to occur just below where formerly the interdental contact occurred.

'Z' springs, sometimes known as double cantilever springs, find regular use for moving upper teeth labially or buccally and are ideal in the treatment of anterior cross-bite. Like finger springs they are usually made in 0.5 mm stainless steel wire but to increase flexibility contain two coils (Fig. 3). Activation is carried out by gripping the wire in contact with the tooth to be moved and pulling the spring forward. This permits both coils to open and unless a rotation is sought, it is important to keep the free arm of the wire parallel with the lingual surface of the instanding tooth.

After activation, as the appliance is inserted the Z spring is compressed and thus exerts pressure against the tooth. Over-activation makes insertion of the appliance by the patient very difficult and because the palatal surface of upper incisors forms an inclined plane, the spring tends to produce a dislodging action, causing the appliance to drop at the front. Frequently the appliance requires extra retention, a point to be considered at the design stage.

When teeth erupt on the buccal side of the arch, it is often difficult to construct a palatally originating finger spring to guide them distally. In such cases buccal retractors prove useful. Probably the most popular type is that designed by Adams.

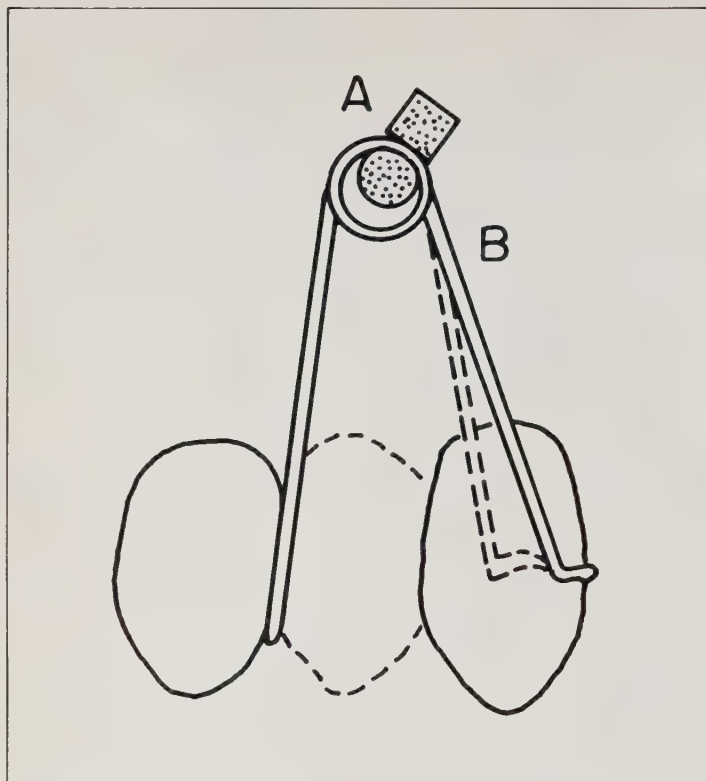


FIG. 4a. Adams type buccal canine retractor. Activation may be carried out around the round beak of the pliers at either point A or B, or in combination.

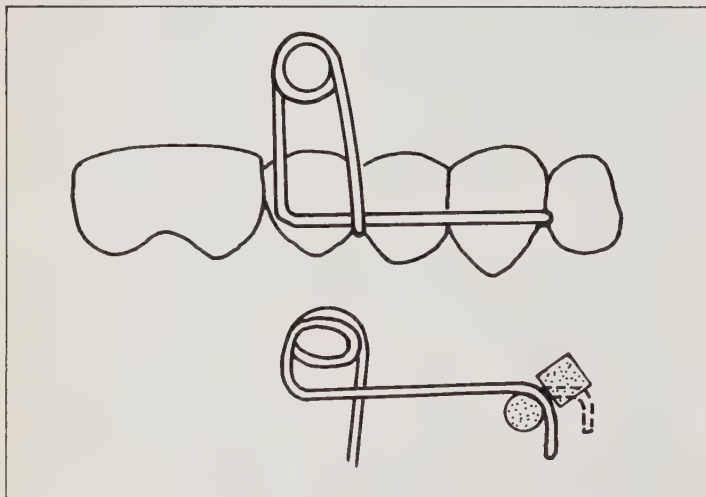


FIG. 4b. Reverse loop buccal canine retractor. Activation is at the distal end where the wire curves mesially. The excess produced is cut off.

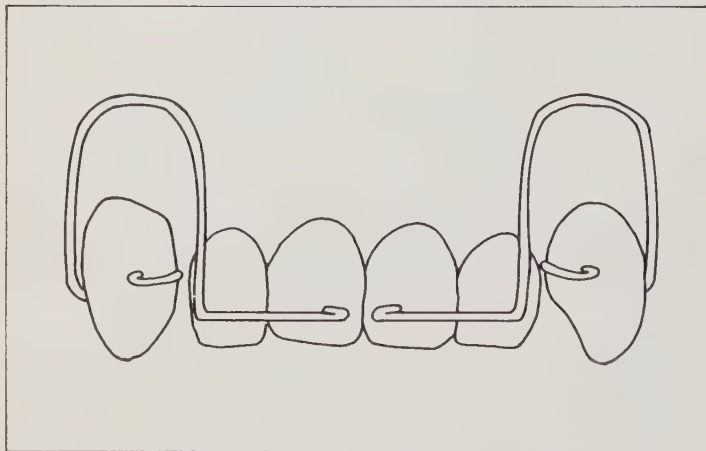


FIG. 5a. Split labial bow for greater flexibility.

Activation of this spring may be performed in two ways. The round beak of spring bending pliers may be inserted within the coil of the spring and the coil closed further, or a bend may be made in the distal or descending arm of the spring. The SE springs are usually made in wire 0.7 mm thick and if activated to produce forces in the range normally required to tip teeth, the distance should be less than the activation of finer palatal springs. (Fig. 4a).

A type of buccally approaching spring with a reverse loop is illustrated in Fig. 4b. This spring is also made of 0.7 mm stainless steel wire, but activation is not carried out within the coil. The bend at the far end of the wire, where it is continued around the tooth to be moved, is adjusted as in the diagram and any excess wire produced at each activation is cut off.

Overjet reduction

Overjet reduction should be postponed until space has been created to allow retraction of the incisors. Usually this will entail provision of space, both sagittally by distal movement of the canines and overbite reduction by the use of flat anterior biteplanes. Two types of incisor retractors providing the type of tooth movement required are illustrated.

A standard labial bow made of 0.8 mm wire (Fig. 5a) but split in the midline, or a finer wire bow, made of 0.5 mm wire sleeved for extra support (Fig. 5b). Splitting the labial bow in effect produces two independent springs and greatly increases flexibility — therefore permitting the use of lighter forces over a greater range. Activation can be carried out either by closing the U loops or direct adjustment of the wire in contact with the incisors (Fig 5c). Activation of the second type of labial regulator may be made at the coils or descending arms, or both (Fig 5b). Care should be taken not to over-adjust either of the last two appliances, and the actual amount of activation should be routinely measured. Figure 6 shows the use of a Boley gauge to measure this. The acrylic of the palate is marked with a small bur and the differences from this point to the labial wire in the active and passive states accurately reflect the range of activation. The total force

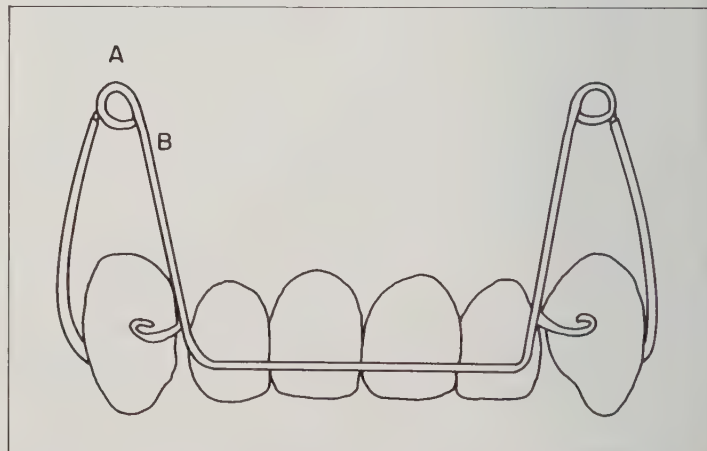


FIG. 5b. 0.5 mm wire labial bow supported for additional strength on either side by tubing; activation is carried out either at A or B.

applied to the labial segment should be in the range of 90-120 g over a distance of 1-2 mm.

As palatal movement of the incisors progresses, it will be necessary to reduce the acrylic. This is done by carefully undermining the acrylic in stages to prevent trapping of gingival tissue as the teeth are retracted. If the overbite has been reduced by a biteplane, too rapid removal of acrylic would allow the lower incisors to re-erupt and to re-establish an increased overbite.

INSTRUCTIONS FOR PATIENTS AND PARENTS

After the fitting and initial adjustments have been completed, verbal instructions should be given to both patient and parent regarding the method of insertion and removal, wearing and cleaning of the appliance. It is a matter of individual preference whether the patient is given the instructions alone or if the parent is present. Certainly it is an advantage to have the parent familiar with the instructions, both from the point of view of assistance and supervision.

1. Insertion and Removal

The patient should be shown the appliance out of the mouth, preferably on the working model, and it is helpful to his/her understanding if the various components are pointed out. With the aid of a hand mirror the patient is then shown how to insert and remove the appliance and asked to demonstrate insertion and removal themselves under supervision.

Emphasis on points such as insertion initially around the front teeth, pressure against the palate to seat the posterior part of the appliance, compression of activated springs, final placement of active labial bows and buccally approaching wires will assist familiarity with the appliance.

When removal is demonstrated, the patient should be taught to use the finger-tips and to pull gently downwards on the molar cribs. The front of the appliance should then be readily disengaged without distortion. Compliance is improved if the patient is told the reason for the use of either anterior or posterior biteplanes, since he/she may

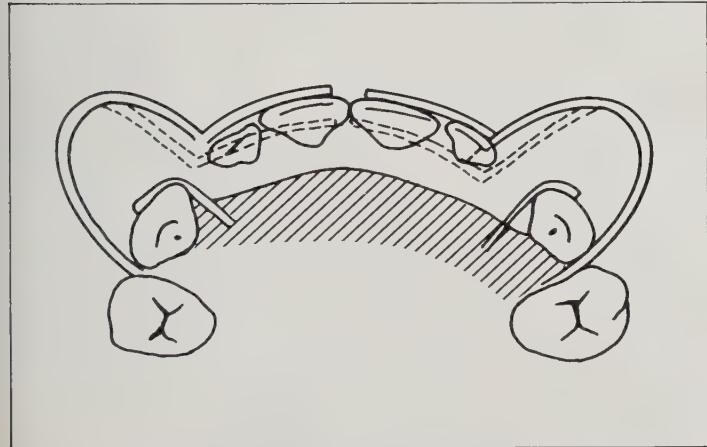


FIG. 5c. Activation of a split labial bow by closing U loops or at the arms in contact with the labial surfaces of incisors.

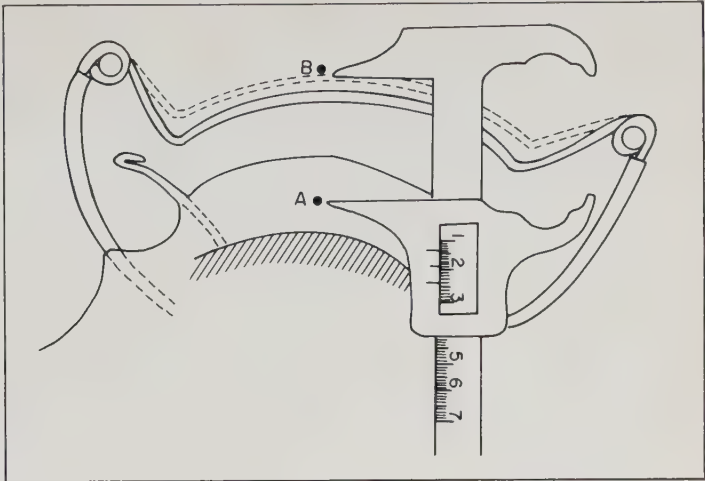


FIG. 6. Use of a Boley gauge to measure the activation of a labial bow. A small hole made with a bur locates one point of the gauge and the distance can be measured between the active and passive positions of the bow.

assume that this is an error of construction and that the acrylic has been left too thick.

2. Wearing Instructions.

The appliance should be worn at all times, including eating. Removal is indicated for contact sports, swimming and to clean the appliance.

The appliance and teeth must be cleaned after every meal and particularly before retiring at night. Use of the patient's own toothbrush and toothpaste for cleaning should be adequate. When at school, if the use of a brush is not possible, simple rinsing is a satisfactory alternative. If there is any doubt about routine oral hygiene, this should be reinforced at the time of fitting and a careful watch kept on subsequent progress.

Point out that speech and eating will pose some problems to start with, but perseverance will overcome these in most cases. Speech with the appliance in position dramatically improves and within 48 hours should be close to normal. Eating becomes easier and it is helpful to cut up the food into smaller pieces and avoid food of a sticky consistency.

3. Activation Incorporating Expansion Screws and Elastics

Clear explanations are particularly necessary for appliances where activation is left to either patient or parent. When expansion screws are used to correct posterior crossbites or to move one or a group of upper anterior teeth labially, two quarter turns per week are usually possible. Anchorage consideration in these cases is less critical. Ensure that either patient or parent is aware of the method of producing a quarter turn. A small arrow cut into the acrylic is a helpful reminder of the correct direction in which the screw should be turned. When two turns a week are possible they should not be carried out simultaneously but equally spaced. The author finds it convenient to mention specific days rather than just say twice weekly.

An explanation that the screw produces tooth movement on the wedge principle will permit the patient to appreciate the tight sensation after each activation. If there is pain or difficulty of insertion following activation, the screw should be turned back one quarter turn and left until the next time. Appliances relying upon an expansion screw will be divided and an increase in the space between the segments further confirms correct turning.

When an expansion screw is being used to move buccal teeth distally, care must be taken to ensure that loss of anchorage does not occur, resulting in an increased overjet. Depending upon the number of teeth to be moved and anchorage available, one or two quarter turns per week are prescribed.

Tooth movement predicated on the use of elastics requires particular care and careful instruction on placement of the elastics.

Due to the loss of elasticity in the oral environment, the elastics should be changed at least every 24 hours and an adequate supply of new elastics provided. Because the range over which the elastics are active is greater than that of correctly adjusted springs, patients should be seen more frequently to ensure that no adverse tooth movement is occurring.

ANTICIPATE PROBLEMS

Slight discomfort is not unusual for the first 24 hours particularly after reactivation and occasionally mild analgesics may be indicated. Should the pain persist beyond this period, or suddenly appear, the patient should be seen as soon as possible.

When appliances are broken, urge the patient or parent to arrange a return visit as soon as convenient. Under some circumstances if the appliance is left out for even a couple of days, tooth movement accomplished over several months will be lost, and after repair the appliance may no longer fit.

Although verbal instruction is probably the most effective method of ensuring an understanding of appliance wear it is also a good idea to have a simple but attractively designed sheet containing the above information. With some appliances, such as the monobloc or headgear, a simple chart on which the patient can record the hours of wear has been found helpful, and the experienced operator becomes skilled in distinguishing between the genuine and fraudulently completed chart.

FIRST APPOINTMENT AFTER FITTING

The patient should be reappointed and seen after an interval of two to four weeks. It is a good idea to ask patients how they are coping and to let them mention problems rather than ask specifically if there are any.

Engage the patient in conversation and notice the speech. If a lisp is still present this may indicate lack of continual wear. Ask patients to remove the appliance and if they fumble and have difficulty this likewise indicates

poor cooperation. To attend and not be wearing the appliance is a bad sign unless there are good reasons.

After some weeks in the mouth, the appliance will show signs of the amount of wear and facets soon appear on biteplanes due to the occlusion. The polished surface is no longer shiny and even in a patient with good oral hygiene some food particles are usually visible.

Intraoral examination will also confirm adequate or inadequate wear. One very reliable sign is the early appearance of a line across the palate coinciding with the posterior edge of the appliance. The presence of this line usually confirms that the appliance is being worn as directed. Slight reddening around the gingival margin due to irritation from the acrylic, and indentation of the gingiva buccal to the upper first molars due to the arrowheads of the cribs often occurs.

The most satisfactory sign of appliance wear is desirable tooth movement, and this should be checked against the original study models. When teeth are being moved mesiodistally in the arch, examine to see if spaces are closing or opening and confirm the amount with a Boley gauge. The rate of tooth movement is important and in the case of mesio-distal movement should be of the order of 1 mm per month.

When either anterior or posterior crossbites are being corrected tooth movement can be measured with a Boley gauge but it is helpful if the present occlusion is compared with that of the diagnostic study models. Any measurement made should be entered upon the patient's record sheet. A count of the number of turns made in an expansion appliance is often revealing since some patients or parents get confused and alternately open and close the screw.

Unfortunately, undesirable tooth movement may occur and at each visit a check should be made to ensure that this is not happening. Anchorage loss is perhaps the most important type of unwanted tooth movement. Loss of anchorage during distal movement of canines, or overjet reduction manifests a forward movement of the posterior teeth used for anchorage. The overjet will be reduced but the space created to permit complete reduction will be lost by the forward movement of molar and premolars.

Where one or a group of posterior teeth are being moved distally anchorage loss will manifest as an opposite movement of all the other teeth. In the upper arch an increase in overjet occurs and in the lower arch a reduction in overjet. A careful comparison with the original study models will reveal any adverse changes.

Other types of unwanted tooth movement may also be found. Badly designed and adjusted springs may cause buccal or palatal movement if the force is not applied perpendicular to the desired direction. Excessive tightening of the Adam's cribs is occasionally responsible for constricting the molars and may even produce a crossbite. Heavy and intermittent forces are associated with excessive tipping of teeth.

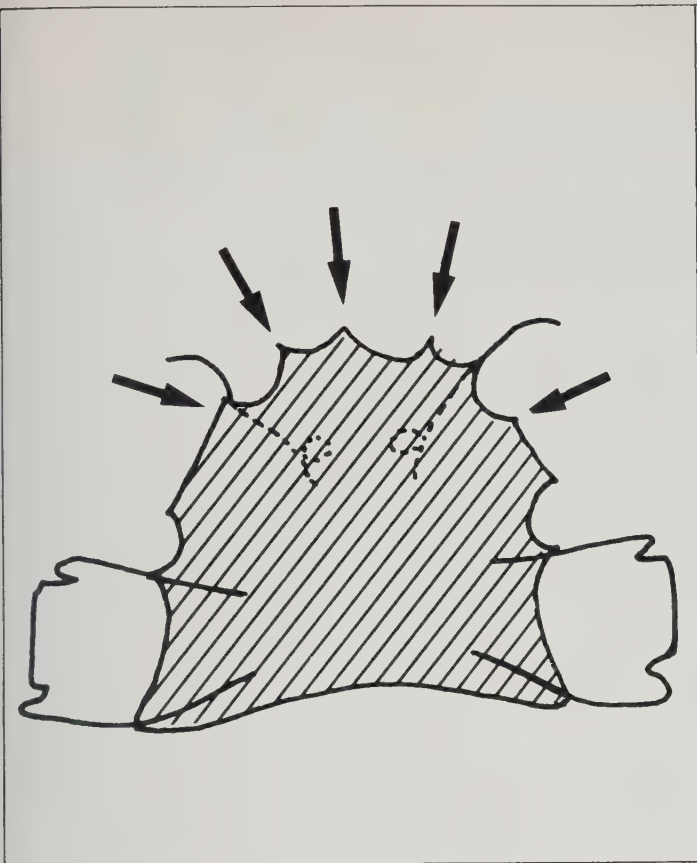


FIG. 7a. Reduction of the acrylic projections illustrated by arrows will permit spontaneous tooth movement.

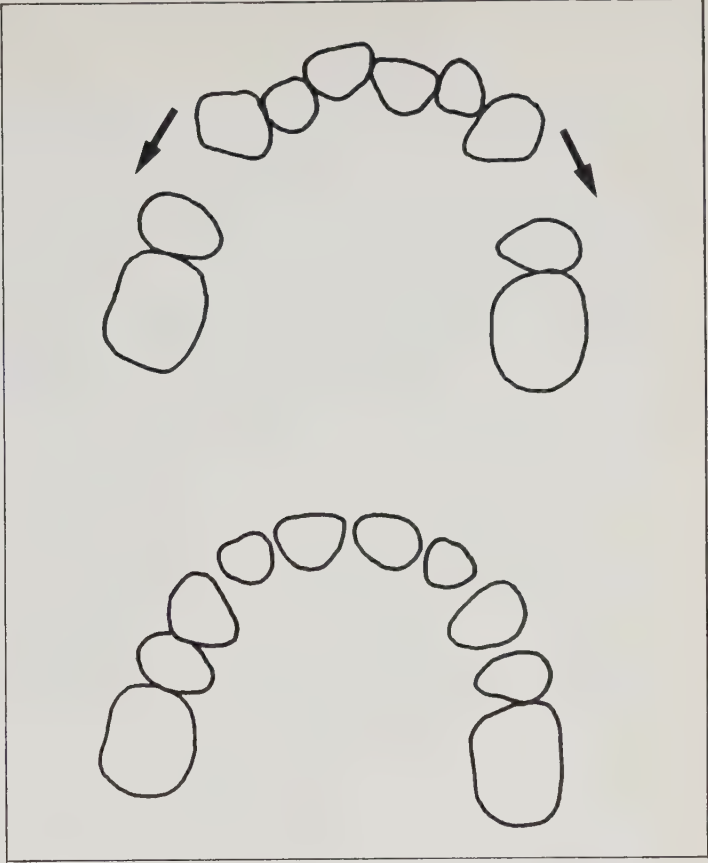


FIG. 7b. Spontaneous incisor improvement as the canines are moved distally.

SUBSEQUENT VISITS

At each visit it is essential that the above points be individually checked and the present occlusion compared with the original study models. The operator should examine the patient with the appliance in position. During its removal check to see if retention is adequate and if further activation of springs is necessary. Retention is increased by adjustment of the Adam's crib described earlier. There is a tendency in many cases to automatically reactivate finger springs even if they have not been rendered passive by tooth movement. In doing so excessive forces are applied and a variety of problems may ensue.

In many cases useful spontaneous tooth movement may occur and this will considerably reduce overall treatment time. This effect is illustrated in Figure 7. The diagram shows a removable appliance being used to retract canines prior to alignment of crowded and rotated incisors. Careful trimming of the acrylic at the sites marked by the arrows (Figure 7a) as the canines are moved distally will allow the spontaneous alignment to occur (Fig 7b).

When the desired amount of movement with that particular appliance has been achieved, the patient is ready for the next appliance and new alginate impressions are needed. It is necessary to render the existing appliance passive, but it should continue to be worn as a retainer until the new one is ready, otherwise relapse may occur and the new appliance will not fit.

LACK OF PROGRESS

The main reason for lack of progress is insufficient wear. However, there are other reasons for insufficient tooth movement, and it is psychologically bad for the patient/operator relationship if the patient is admonished unjustly for poor cooperation.

Some causes are:

1. Tooth movement is actually prevented by the appliance or cuspal interference. Check to ensure that no acrylic or wire is over-extended to block movement (Fig. 8).

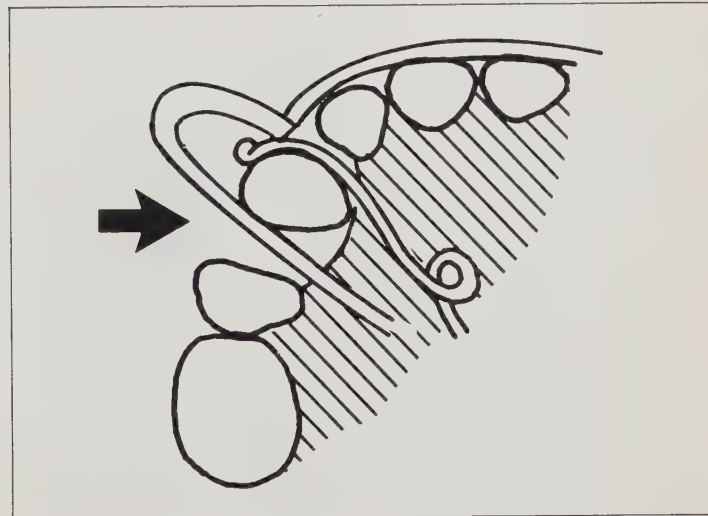


FIG. 8. Further distal movement of canine prevented by position of labial bow.

With the teeth in occlusion, there should be no interference from the opposing arch. Anterior or posterior biteplanes will remedy this problem.

2. Under-activation obviously fails to stimulate the process of resorption necessary for tooth movement. Over-activation beyond the optimum pressure slows tooth movement, in addition to making the tooth painful.
3. Incorrect insertion, particularly of finger springs, will mean that the force is not correctly applied and may even be active in the wrong direction.
4. Rarely, lack of progress may be due to ankylosis or a buried tooth blocking movement. Full mouth radiographs taken before initiation of treatment should give information on these two potential causes.

Other appliance problems may arise at any time during active treatment:

A. Poor fit:

- (i) if not worn continuously, spontaneous drift is possible and the appliance will no longer fit
- (ii) distortion may occur from mishandling or warpage due to cleaning in very hot water.

B. Poor retention:

- (i) some springs tend to dislodge more easily than others and there may have been insufficient retention in the original design
- (ii) some patients are persistent "fiddlers" and flick the appliance up and down with their tongue. This habit causes both a loosening of the cribs and eventually may result in work hardening of the metal parts and ultimately their fracture. The habit should be suspected if the patient dislodges the appliance with the tongue, rather than the fingers, when removing it.

ABNORMAL MOBILITY OF TEETH

Some increase in mobility is to be expected because of the pattern of periodontal and bone remodelling. Excessive mobility can occur because of excessive force, traumatic occlusion or intermittent appliance wear, allowing teeth to drift to their former position. Sometimes root resorption results. This may be idiopathic or due to persistent "jiggling" of the tooth.

RETENTION

At the conclusion of all orthodontic tooth movement, the repositioned teeth should be in equilibrium with their surrounding environment. If, after a period of 3-4 months, such a retention equilibrium does not exist, relapse is inevitable.

The stability of repositioned teeth is clearly an important factor to consider at the treatment planning stage. The decision to rely upon permanent retention of a potentially unstable occlusion, needs careful evaluation and the patient and parent should be fully informed of the circumstance prior to treatment.

Some treatment plans involve movement of a tooth or teeth into a very stable position and the appliance may be withdrawn almost as soon as tooth movement is complete. Correction of an anterior crossbite where the repositioned tooth is retained by an adequate overbite is perhaps the best example of this type of treatment.

Other tooth movements may be stable in the long term but if the appliance is withdrawn immediately relapse may occur. Relapse in such cases is due to elastic recoil of tissues surrounding the teeth. The problem may be overcome by continued wear of the appliance until tissue organization is complete and a period of six months is usually considered necessary to allow this to occur. Retention may be effected by continued use of the same appliance but with the active component rendered passive or alternatively by the construction of a special retention appliance.

Patients having worn appliances incorporating anterior or posterior biteplanes should have these gradually reduced to enable the occlusion to re-establish itself. Clinical signs which may be utilized to confirm that the result is stable are lack of excessive movement of the corrected teeth and apparent harmony with surrounding soft tissues. Gradual withdrawal of the appliance over a period of three to six months, first from full-time to night-only and then every other night is a suitable regime.

Dr. Taylor was an assistant professor in the Department of Paediatrics and Community Dentistry, University of Western Ontario, at the time this paper was written. He is currently a consultant orthodontist at the Glasgow Dental Hospital and School, 378 Sauchiehall Street, Glasgow, Scotland G23JZ.

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Conservative preparation of abutment teeth to replace missing premolar teeth

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SUMMARY

Two methods of conservative replacement of maxillary first premolar teeth are presented in this clinical case report. The conservative preparation of the cuspid tooth allows for a good esthetic result with minimal tooth preparation and no interference with lateral functional movement. Supragingival margin placement has minimal irritation on gingival tissue.

A missing tooth in the dental arch may cause problems to the patient in function, esthetics, tooth migration and mobility. Usually, its replacement is required to stabilize the dental arch and improve these problems.

At the same time, the extensive preparation of the teeth adjacent to the space as bridge abutments may create unacceptable results for the patient. The patient and practitioner want minimal tooth preparations to be carried out on sound teeth while restoring esthetics and with a minimum of gold alloy exposure.

Subgingival margin placement of full crowns on cuspid teeth can cause tissue irritation and in some cases labial tissue and bone recession have been observed. The placement of a restoration margin away from gingival tissue can minimize any irritation and allow close adaptation of the material to the tooth surface to be checked and adjusted.

The replacement of the maxillary premolar allows for very conservative procedures, particularly in the preparation of the cuspid tooth as an abutment. This tooth is often clinically sound, has a long root and is stable in the mouth under function. This paper reports on two methods for the clinical treatment of missing bilateral premolar teeth.

CASE REPORT

A female patient in her mid-30s presented with bilaterally missing premolar teeth. They had been removed many years earlier, with minimal drift of the teeth in the posterior segments (Fig 1). The patient wished to have the

teeth replaced with the best esthetic result, showing minimal gold and with a minimum of tooth preparation.

Both cuspids were sound, caries- and restoration-free. Function of the left and right sides was cuspid rise in lateral mandibular movement. The mandibular first premolars were also missing, limiting function on the pontic. Left and right maxillary second premolars had large MOD amalgam restorations present, with minimal thickness of remaining buccal enamel. The maxillary left first molar had a large MODB amalgam restoration with some marginal breakdown apparent.

Two different restorative procedures were chosen for the maxillary left and right sides to restore esthetics and function, demonstrating two possible ways to treat this problem.

Right Side: A distolingual inlay preparation was made in the right maxillary cuspid. A rubber base impression was taken and a die poured (Fig 2). The preparation did not involve any of the functional areas of the tooth surface in excursive movements. The inlay with a semi-precision female attachment was cast in a Type III dental gold alloy* and cemented into the cuspid with zinc phosphate

*Firmalay, J.F. Jelenko, Mississauga, Ontario

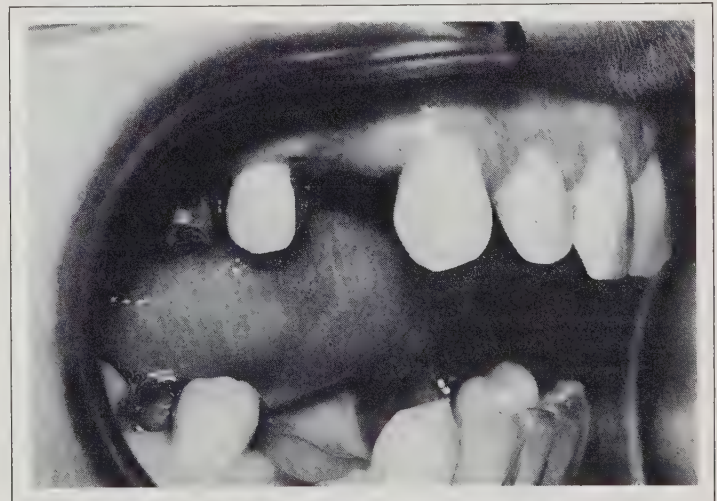


FIG. 1. Clinical condition of patient before treatment. Labial view, right side.



FIG. 2. Dental stone die with inlay preparation. Arrow shows cuspid contact in function.



FIG. 3. Inlay cemented in distolingual of upper right cuspid with zinc phosphate cement (mirror image).



FIG. 4A and 4B. Cantilever bridge with semi-precision attachment to attach to the upper right cuspid.



FIG. 5. Occlusal view of bridge and inlay, cemented with zinc phosphate cement.

cement (Fig 3). A crown preparation was made on the maxillary right second premolar, a second impression was taken in rubber base and a cast poured to wax up the two-unit bridge with a male semi-precision attachment into the distolingual inlay on the cuspid. The bridge was cast as one unit in high fusing gold alloy** and porcelain was applied to the buccal and occlusal surfaces of the pontic and full crown (Figs 4A and 4B). The bridge was inserted and the crown retainer cemented to the abutment with zinc phosphate cement (Fig 5).

Left Side: A pin-retained three-quarter crown preparation was made on the maxillary left cuspid and full crown preparations were cut on the second premolar. Parallel pin holes were placed freehand to a depth of $1\frac{1}{2}$ mm in dentine in the cuspid. The maxillary first molar which had a large amalgam restoration was also prepared for a crown. A rubber base impression was taken and the cast was poured (Fig 6). The pin-retained three-quarter crown was cast in Type III gold* and the two crowns and pontic, in high fusing ceramic gold alloy**. Porcelain was applied to the buccal surfaces of the full crowns and pontic (Fig 7). The gold alloy of the cuspid three-quarter crown finishes just short of the incisal edge on the mesial but overlaps to the facial towards the distal, allowing enough bulk of metal for the post-soldered joint with the pontic. The single molar crown and the three-unit bridge were cemented with zinc phosphate cement (Fig 8). Both these bridges have now been in place for more than four years.

DISCUSSIONS AND CONCLUSIONS

The placement of an inlay with a semi-precision attachment in a cuspid attached to a two-unit bridge for a missing premolar tooth is a very esthetic and conservative procedure.

Some of the other advantages include: no interference or change of the functional contacts in excursive movements; two types of gold alloy can be used without a solder joint; and the two-unit bridge can be cast intact. Margins can be kept supra-gingival, causing minimal tissue irritation. The pin-retained three-quarter crown preparation is less conservative and requires paralleling of the insertion paths of pins and castings.

Full lingual coverage of the cuspid is required and care must be taken to maintain the original function in lateral excursive movements. This casting is less esthetic, with some incisal edge exposure of the gold alloy. Because of the lingual functional occlusion, a Type III alloy with improved physical properties may be preferable to the high-fusing ceramic alloy. However, a post-soldering procedure after porcelain application is required between the two different alloys.

The units are soldered, using a lower melting solder than the fusion temperature of the porcelain. This allows for a

**Jelenko O, J.F. Jelenko, Mississauga, Ontario



FIG. 6. Cast of upper left cuspid, second premolar and first molar preparations.

Type III gold alloy casting containing some copper, which will contaminate and colour porcelain to be joined to a ceramic gold alloy. This bridge is more rigid than the semi-precision attached bridge under heavy functional loading.

Both types of preparations for cuspid-supported short bridges provide good esthetics, minimal effect on lateral movement and less tooth reduction than full crown preparations. With margins placed supragingival, there is less chance of gingival tissue irritation and future iatrogenic tissue changes.

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FIG. 7. Porcelain applied to the buccal surfaces of the ceramic gold alloy crowns and pontic.

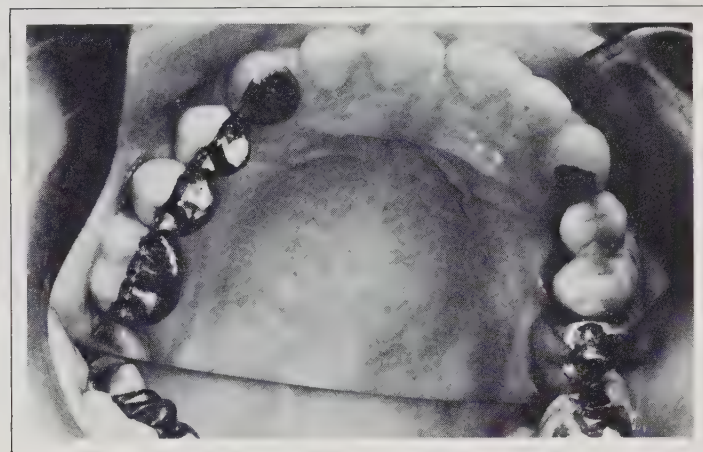


FIG. 8. Occlusal view of completed case showing cemented maxillary bridges and full crown.

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The Copper Band for Matricing Problems

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Patsy R. Evans, BA, MEd
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ABSTRACT

Badly broken-down teeth burden matricing procedures with unique demands and make their manipulation difficult. The copper band matrix produces superior restorations which are gratifying for the dentist and, at the same time, offers an alternative to overcome a condition that heretofore often caused the dentist frustration, disappointment and financial loss. The copper band matrix provides the individualized and customized final contours, rigidity and stability necessary to properly restore mutilated teeth to anatomical form and function. A method for fabricating a copper band matrix is illustrated and presented in detailed step-by-step procedures.

The demand for multiple surfaced amalgams may increase as fixed prosthetic treatment of badly broken-down teeth becomes less practical because of inflation, increased cost of materials and third party payments.

Matricing badly broken-down teeth burdens matricing procedures with unique demands and makes their manipulation difficult. The long and often deep circumferential gingival seats with extensively destroyed axial tooth contours present a great challenge to any matricing procedure.

An ideal matrix would provide stable and anatomically correct contours and, at the same time, be easy and fast to

adapt. Since a universal matrix encompassing all these qualities is not currently available, a valuable and time-saving alternative could be the copper band matrix.

The copper band matrix provides the individualized and customized final contours, rigidity and stability necessary to properly restore mutilated teeth to anatomical form and function. Seemingly, other matrices lack these characteristics.

Many dentists consider a Universal (Tofflemire) type matrix easy to handle but it lacks contours and the necessary stability when it is necessary to completely or nearly circumferentially matrix teeth; welded steel bands fit gingival areas well under similar conditions but contour with difficulty, require lengthy fabrication and the use of an electric soldering machine.

Mastery of the copper band fabrication technique is well worth the time investment because it is the only matrix which yields consistent and gratifying results when restoring badly broken-down teeth.¹

Copper bands are cylindrically shaped, seamless and 0.0014 inch thick (0.36 mm or 36GA) pure copper. They are supplied in sizes numbered 1 through 20, rather than millimeters of width as are most premanufactured temporaries. The bands are generally packaged in a bi-level, 20 bin plastic or Bakelite chest.* Twenty protruding "gaug-

*Manufactured by Moyco Industries Inc., 21st and Clearfield Streets, Philadelphia, PA 19132, U.S.A.

ing" knobs on the top of the chest correspond to the 1-20 numbered band sizes (Fig 1). Individual band sizes are available and all sizes are supplied in either hard or soft copper. The band's manufacturer anneals the soft type, thus precluding the first annealing (Step 3) in the matrix fabrication but increases the soft band's cost.

A copper band matrix fabrication by the following method takes approximately 5 to 10 minutes.

Step 1: Determining band size

The correct band size is a diameter which allows the copper band to just clear the cervical areas of the tooth being restored. Either trial-and-error or a loop method may be used to select the correct band size.

When the trial-and-error method is used, various sized bands are tried over the prepared tooth until the correct size is found. In the loop method, a thin ligature wire or dental floss is extended about the prepared tooth at the greatest cervical diameter and/or where the copper band is to fit. The wire is tightened, or the dental floss tied about the tooth, forming a loop which is transferred to the "gauging" knobs on the top of the copper band chest to ascertain the size. A band size number is listed beside each knob.

Step 2: Determining initial gingival outline

The selected band is carefully placed over the prepared tooth and pushed beneath the gingival tissue until it is past the deepest gingival margin. With the band in this position, use an explorer to scribe a mark on the band's

buccal-gingival area. This mark will reference the band's placement during later positionings. (Note: To guard against injury to the gingival tissue, particularly interproximal injury, it may be necessary to relieve the band in a curved gingival-occlusal direction at the mesial and/or distal.)

Next, scribe the tooth's circumferential gingival outline on the band and remove the band from the mouth. Use a small, smooth-bladed, curved crown and collar scissors to cut the copper band at the gingival line just scribed. Reposition the altered band over the tooth and repeat the scribing and cutting until the band fits the desired circumferential gingival outline (Fig 2).

Step 3: Annealing to soften the copper

If the hard type copper band is being used, the next step is annealing, which softens the hard copper to facilitate the custom contouring which follows. Annealing is accomplished by holding the hard copper band in an open flame and heating it to a cherry-red colour. Remove the band from the heat, allow it to bench cool, and rinse free of residue.²

Step 4: Festooning

The softened band is easily made to fit tightly against the tooth's gingival contours and prepared margins by festooning. Use contouring pliers to gradually work around the band's gingival circumference, bending it slightly inward. Periodically return the band to the pre-

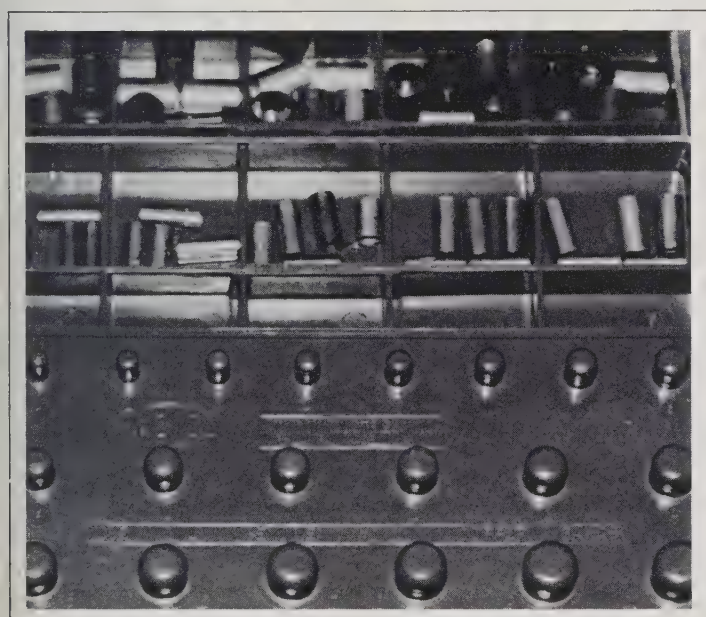


FIG. 1. Open copper band chest and "gauging" knobs.

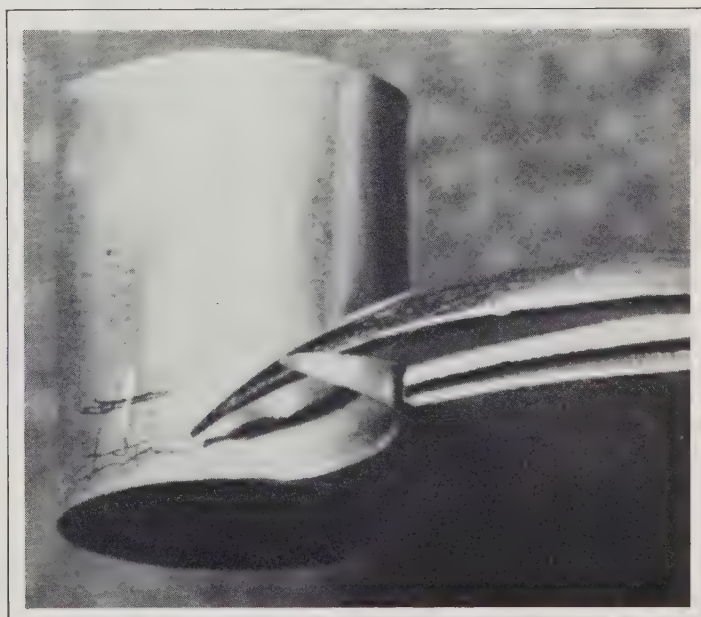


FIG. 2. Cutting the copper band to the gingivally scribed line. Note the reference mark.



FIG. 3. Festooning the copper band with pliers.

pared tooth to check for tightness and correctness of fit. How #110, Abell #112, Johnson #114, Peeso #115, or Goslee #136 pliers may be used to festoon the band (Fig 3).

Step 5: Feathering

Next, the copper band's festooned edge is thinned and polished to protect the gingival tissue by a procedure called feathering. First, use a mounted disc (such as a Joe Dandy) to smooth and remove plier marks. To complete the polish, use a carborundum stone, followed by a mounted rubber wheel. This completes the gingival fit of the copper band. If the band's softness resulted in distortion during festooning and feathering, its basic cylindrical shape may be easily regained by placing it over the proper numbered "gauging" knob.

Step 6: Determining occlusal-gingival band height

The occlusal-gingival height of the band is established by placing the gingivally contoured band over the prepared tooth and scribing a line around the band at the estimated marginal ridge's varying heights. Remove the band from the tooth, cut off the occlusal portion that is excessive, and polish the cut edge.

If this matrix is for a core build-up that will soon be prepared for a fixed prosthetic restoration, you may choose to advance to Step 10 because core build-ups do not need the full anatomical contouring which follows in Steps 7-9. (Note: A copper band used in core build-ups need only be festooned, feathered, and adjusted to occlusal-gingival band height. In such a case, a copper band is frequently allowed to remain on the tooth following placement of the restorative materials.

If this is the treatment, the fixed restoration should be scheduled in the near future because lack of occlusal and/or proximal contact could be deleterious to the patient's oral health; or you might consider the core build-up for the reception of an interim anatomical temporary crown.)



FIG. 4. Copper band matrix stabilized with compound.

Step 7: Band thinning to accommodate contouring

Thinning the band is generally needed to incorporate the desired final axial circumferential contours of tooth form.

If contouring is minimal, it may be achieved without thinning. Where thinning is needed, reduce the external thickness of the band by using a large sandpaper or Joe Dandy type disc. This eases the rigidity of the band's wall to facilitate burnishing it to contour; however, the structural support strength of the band needs to be retained in order to satisfy that requirement of a matrix. This serves to limit thinning.

Mesial and distal thinning of the band is usually necessary, particularly at contact areas, to allow for outward proximal contours toward adjacent tooth contacts. Proximal thinning also aids in the removal of the band from the interproximals after amalgam condensation.

Step 8: Band expansion at contacts

After thinning, and while the band is still out of the mouth, a contouring plier such as Johnson #114 or Abell #122 may be applied to the band at the proximal contact areas to give them proper outward contour. To develop buccal and/or lingual tooth contours, hold the band against a solid surface and apply a burnisher to the inside surface of the band at the desired areas. Occasionally, some operators use an adjustable #308 band stretcher to accomplish band expansion.⁴

Step 9: Final axial contouring

The partially contoured copper band is now repositioned over the prepared tooth and the final axial contours incorporated into the matrix by hand burnishing. At this point, the band's occlusal circumference will frequently require reduction to snugly fit remaining facial and/or lingual tooth contours. This may be accomplished by placing occlusal-gingival direction cuts in the band, being careful to avoid completely cutting through the band and destroying its circular integrity. Now, the resulting flap

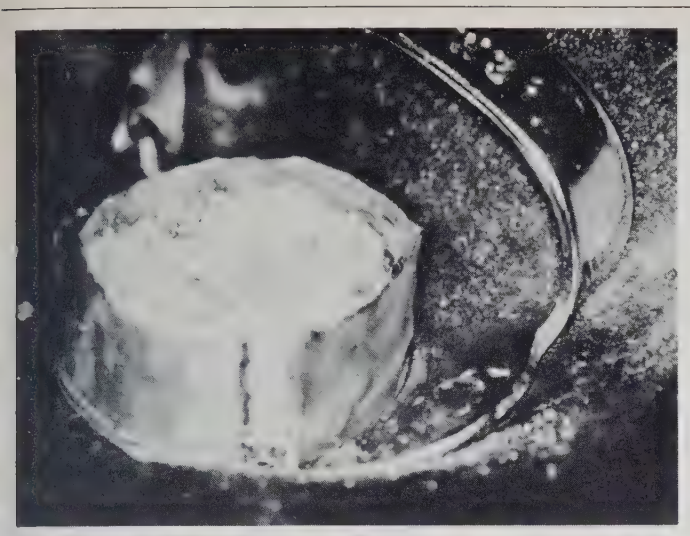


FIG. 5. Copper band matrix cut in an occlusal-lingual direction at an accessible buccal location for removal.

type edges about the band's occlusal edge are easily burnished against the remaining marginal ridges.

Step 10: Annealing to restore rigidity to the copper

Once all contours are satisfactorily established, the band is taken from the mouth, again held in an open flame, heated to a cherry-red, removed from the flame, and — this time — quenched in cold water. The cold water quenching rehardens the copper to give the necessary rigidity to the matrix. Cleanse the band thoroughly before repositioning it over the tooth to confirm the band's complete adaptation.

Step 11: Matrix stabilization

As with any matrix, the customized copper band matrix is wedged gingivally with wooden wedges in order to stabilize the band and prevent restorative material flash. If needed, additional stabilization may be accomplished through the use of low fusing compound applied buccal and lingual about the band, making sure the compound enters the interproximals. This compound application is similar in purpose to stabilization of a rubber dam clamp. It assures matrix adaptation, stabilization, and rigidity (Fig 4).

Step 12: Final contouring of contact areas

Following compound application and hardening, contact areas are given additional contouring by pushing them outward with a warmed burnisher. This action slightly warms the compound and allows the band to be forced outward against the adjacent tooth for contact and a final stable interproximal contour.⁵ The now completely contoured and stabilized copper band truly satisfies the requirements of a circumferential anatomical matrix and is ready for the restorative material to be placed.

Step 13: Matrix removal

Removal of any extensive matrix such as a copper band immediately following amalgam condensation and super-



FIG. 6. Copper band matrix removed and restoration ready for carving.

ficial carving should be done with care, since any vibration or movement of the matrix could be transferred to the fresh alloy and possibly result in its fracture and/or loosening.

If pins were used in the restoration, exercise extra care in not touching them with any rotating instruments used in band removal or amalgam carving because vibrating them could also fracture the fresh alloy. Remove the copper band by cutting it in an occlusal-lingual direction at an accessible buccal location (Fig 5). A high-speed rotating diamond instrument accomplishes this cut satisfactorily. Some operators prefer a bur for making this cut; others tear the band apart at a thinned portion. The use of a bur tends to catch and pull the soft copper, possibly transmitting a fracturing force to the fresh alloy. Tearing may result in a similar force. Once the band is cut, grip the free ends, one at a time, with cotton pliers and carefully twist and separate them away from the body of the restoration, passing each end separately through its contact. Previous band thinning at the contacts helps facilitate this. The restoration's carving is now completed (Fig 6).

Once the copper band becomes office routine, these fabrication steps may be altered or omitted as indicated by the clinical situation.

Dr. St. Arnault is associate professor, Department of Operative Dentistry, Oklahoma University College of Dentistry, Oklahoma City, Oklahoma 73190, U.S.A.

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INSTRUCTIONS FOR CONTRIBUTORS

(Scientific articles)

Previously unpublished articles, critical reviews of material on advances in dentistry and clinical reports are welcomed by the Journal of the Canadian Dental Association for consideration for publication. Material is accepted by the Journal on the understanding it is submitted solely to this publication.

SCIENTIFIC ARTICLES: should not exceed 2,500 words with a minimum number of illustrations, diagrams, photographs, tables or graphs. An average of 20 references is acceptable.

MAJOR REPORTS: are longer contributions dealing with diagnosis and treatment of dental disease, studies in education, clinical and laboratory research and other detailed investigations pertinent to dentistry and related fields.

CLINICAL REPORTS: are brief (up to 1,500 words) reports, case histories and clinical observations. References should be limited and a minimum number of illustrations used.

OPINIONS: fully documented (800 words or less), are welcome for publication at the discretion of the editor.

WORD COUNT: is based on the calculation of approximately 250 words typed, double-spaced on 8½ x 11 paper.

MANUSCRIPT REQUIREMENTS: submit three (3) copies (original and two copies) to the editor, Journal of the Canadian Dental Association, 1815 Alta Vista Drive, Ottawa, Ontario K1G 3Y6. All graphs, photographs, charts and tables must also be submitted in triplicate.

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1. Hechter, F.J. Symmetry and dental arch form of orthodontically treated patients. JCDA 44:173-184, 1978.

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2. Kilpatrick, H.C. Work simplification in dentistry, ed. 2. Philadelphia, Saunders, 1964.

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Announcements

CANADA

CDA/ODA 1982 National Convention, The Sheraton Centre, Toronto, Ontario, May 9-12, 1982. Contact: Mrs. W.C. Durham, Convention Manager, Ontario Dental Association, 234 St. George Street, Toronto, Ont. M5R 2P2.

April/avril

Canada's 38th Annual National Health Week, theme "Growing Up Healthy", April 4-10, 1982. World Health Day, theme "Add Life to Years", April 7, 1982. Information developed and distributed by the Health League this year will stress the importance of growing up healthy. Sponsored by: The Health League of Canada, 1560 Bayview Avenue, Toronto, Ont. M4G 3B9.

May/mai

College of Dental Surgeons of British Columbia Convention, Hotel Vancouver, Vancouver, B.C., May 2-5, 1982. Contact: Venue West Executive Services Ltd., 1704 1200 Alberni Street, Vancouver, B.C. V6E 1A6.

Canadian Academy of Restorative Dentistry and Canadian Academy of Prosthodontists Annual Meeting, Park Plaza Hotel, Toronto, Ontario, May 7-8, 1982. Contact: Dr. Robert Echlin, 992 Birchwood Avenue, Burlington, Ont. L7T 2H8.

The Canadian Association of Orthodontists 1982 Annual Meeting and Scientific Sessions, The Sheraton Centre, Toronto, Ontario, May 7-10, 1982. Contact: Dr. Eric Luks, Convention Chairman, 5046 - 3080 Yonge Street, Toronto, Ont. M4V 2K6. Phone: (416) 481-4040 or Dr. Ray Bozek, Program Chairman, 7 - 2069 Gore Street, Burlington, Ont. L7R 1E2. Phone: (416) 639-6500.

The Academy of General Dentistry Presents Dr. Harold Nemets — "New and Basic Innovations in Crown & Bridge", Essex Room, Sheraton Centre, Toronto, Ontario, May 9, 1982. Contact: Dr. G. Gunther, 520 Buchanan Cresc., Ottawa, Ont. K1J 7X9.

The Canadian Physiotherapy Association Annual Congress, Hotel Nova Scotian, Halifax, Nova Scotia, May 18-22, 1982.

Contact: Chairman of Scientific Subcommittee, Congress '82, P.O. Box 3414, Halifax, N.S. B3J 3J1.

Journées Dentaires du Québec, Queen Elizabeth Hotel, Montreal, Quebec, May 23-27, 1982. Contact: Dr. Morton R. Lang, Journées Dentaires du Québec, 3565 Berri Street, Suite 200, Montreal, Que. H6L 4G3. Tel. (514) 842-9112.

Pediatric Behavioral Medicine Conference sponsored by The Children's Hospital of Eastern Ontario and the University of Ottawa, Skyline Hotel, Ottawa, Ontario, May 28-29, 1982. 300-word abstract submissions are invited for a poster session. Contact: Dr. Philip Firestone, Dept. of Psychology, Children's Hospital of Eastern Ontario, 401 Smyth Road, Ottawa, Ont. K1H 8L1.

June/juin

International Symposium on Adolescent Nutrition and Food Behaviour, University of Prince Edward Island, Charlottetown, P.E.I., June 8-12, 1982. Contact: Adolescent Nutrition Symposium, Dept. of Home Economics, University of Prince Edward Island, Charlottetown, P.E.I. C1A 4P3, (902) 892-4121.

Alberta Dental Association 1982 Convention (theme "Prosthodontic Patient of 1980's"), Westin Hotel, Edmonton, Alberta, June 9-12, 1982. Contact: Dr. A. Bene or Mrs. F. Ingham, 4044 Dentistry Pharmacy Centre, University of Alberta, Edmonton, Alta. T6G 2N8.

XII Biennial Conference on Canadian Dental Education and Research and Meetings of the ACFD, Dalhousie University, Halifax, Nova Scotia, June 16-21, 1982. Contact: Kaireen Vaisson, Co-ordinator, Continuing Education in Dentistry, Faculty of Dentistry, Dalhousie University, Halifax, N.S. B3H 3J5. Phone: (902) 424-2248.

73rd Annual Conference of the Canadian Public Health Association, Explorer Hotel, Yellowknife, Northwest Territories, June 21-24, 1982. Deadline for submitting abstracts is December 31, 1981. For further details contact: Dr. David Martin, Chairman, Scientific Program Committee, c/o Canadian Public Health Association, 1335 Carling Ave., Suite 210, Ottawa, Ont. K1Z 8N8. Phone: (613) 725-3769.

July/juillet

The Sixth Congress of the International Association of Dentistry for the Handicapped, Harbour Castle Hilton Hotel, Toronto, Ontario, July 20-25, 1982. Contact: The Programme Chairman, Sixth Congress I.A.D.H., Dept. of Paedodontics, Faculty of Dentistry, University of Toronto, 124 Edward St., Toronto, Ont. M5G 1G6.

August/août

Second International Congress on Hospital Dental Practice, Four Seasons Hotel, Toronto, Ontario, August 26-29, 1982. Contact: Dr. C.O. Munro, Programme Chairman, 2nd International Congress on Hospital Dental Practice, 124 Edward Street, Toronto, Ont. M5G 1G6.

October/octobre

The Fourth Biennial Symposium on Occlusal Studies, Hyatt Regency Hotel, Vancouver, British Columbia, October 17-20, 1982. Contact: The Society for Occlusal Studies, 1729 South Douglass Road, Anaheim, California 92806, U.S.A. or The Director, Division of Continuing Dental Education, 2199 Westbrook Mall, U.B.C., Vancouver, B.C. V6T 1Z7.

International

April/avril

The American Association of Endodontists Career Opportunity Exchange and Registry at their annual meeting, Phoenix, Arizona, April 21-24, 1982. Contact: Dr. John F. Bucher, Box J-436, JHMHC, University of Florida, Gainesville, Florida 32610, U.S.A.

Annual Scientific Conference of the Irish Dental Association, Limerick Inn Hotel, Ennis Road, Limerick, Ireland, April 21-25, 1982. Contact: Declan Corcoran, Public Relations Officer, Irish Dental Association, 29 Kenilworth Square, Dublin 6, Ireland.

The Third International Dental Congress of the F.D.A. and Twelfth Arab Dental Congress, Amman, Jordan, April 24-28, 1982. Contact: Dr. A. Aziz Haj-Ahmad, Chairman of 12 ADC Organizing Committee, Jordan Dental Association, P.O. Box 1326, Amman, Jordan.

May/mai

1982 World's Fair, Knoxville, Tennessee, May 1 — October 31, 1982. Contact: Anne Russell, Director of Special Affairs, City of Knoxville, P.O. Box 1631, Knoxville, Tennessee 37901, U.S.A. Phone: (615) 521-2549.

Australian Dental Association, 23rd Dental Congress, Perth, Australia, May 2-7, 1982. Contact: Australian Dental Association, 23rd Dental Congress, P.O. Box 29, Parkville, Victoria, Australia. 3052.

The Dental Association of South Africa, Diamond Jubilee Congress, Durban, South Africa, May 10-14, 1982. Contact: Dr. Helmut Heydt, Executive Secretary, Dental Association of South Africa, Private Bay One, Houghton, 2041, South Africa.

XIth Annual Meeting of the European Academy of Gnathology, Convention Centre, Paris, May 19-22, 1982. Contact: XI^e Congrès de Gnathologie, P.M.V., B.P. 246, 92205 Neuilly-sur-Seine, France.

The International Congress of Oral Implantologists World Congress VI for Oral Implantology, Hyatt Regency Hotel, Maui, Hawaii, May 21-23, 1982. Contact: Mr. Clifford J. Kirschner, Executive Director, The International Congress of Oral Implantologists, P.O. Box 2277, Grand Central Station, New York, N.Y. 10163, U.S.A.

June/juin

The 1982 Annual & Scientific Meeting of the British Dental Association, Metropole Hotel, Brighton, England, June 2-5, 1982. Contact: British Dental Association, 64 Wimpole Street, London W1M 8AL, England.

Holistic Dental Association Conference, Doubletree Inn, Houston, Texas, June 3-6, 1982. Contact: Dr. Hershall A. Allan, Program Chairman, Holistic Dental As-

sociation, 6550 Tarnef, Suite 15, Houston, Texas 77074, U.S.A.

The 88th Annual Meeting of the American Dental Society of Europe, Park Hotel, Sandefjord, Norway, June 28-July 2, 1982. Contact: Hon. Sec. Dr. Brian J. Parkins, 57 Portland Place, London W1N 3AH, England.

July/juillet

The University of Texas — Applications are being accepted for the Postdoctoral Program, Dental Diagnostic Science at the University of Texas Health Science Center at San Antonio, for the class beginning July 1, 1982. Contact: Office of the Associate Dean for Advanced Education, Dental School, The University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Dr., San Antonio, Texas 78284, U.S.A.

The New Zealand Dental Association 11th Biennial Conference, Rotorua, New Zealand, July 17-23, 1982. Contact: New Zealand Dental Association, 238 Remuera Road, P.O. Box 28 084, Auckland 5, New Zealand.

The Pan-Pacific International Symposium on Biomaterials, University of British Columbia, Vancouver, British Columbia, July 28-30, 1982. Papers are invited (closing date April 2, 1982) on biomaterials especially in orthopedic, cardiovascular and dental materials and tissue mechanics. Contact: Dr. R.H. Roydhouse, Secretariat at Biomaterials '82, 1704, 1200 Alberni St., Vancouver, B.C. V6E 1A6.

September/septembre

Asociacion Argentina de Ortopedia Funcional de Los Maxilares, 25th Anniversary, Buenos Aires, Argentina, September 19-23, 1982. Contact: Dr. S.A. Gandolfo, Secretario, Asociacion Argentina de Ortopedia Funcional de Los Maxilares, Buenos Aires, Argentina.

October/octobre

Fédération Dentaire Internationale, 70th Annual World Dental Congress, Vienna, Austria, October 11-16, 1982.

November/novembre

International Congress of the Association Dentaire Francaise, Palais des Congres, Paris, France, November 23-27, 1982. Examining the two main aspects of professional activity — Preventive Dentistry & Therapeutic Care. Simultaneous interpretation in English, French and German will be available during the main scheduled events. Contact: Dr. Guy Roberts, Secretary-General, 92 avenue de Wagram, 75017 Paris, France.

British Dental Association — Metropolitan Branch, First International Prosthodontic Symposium, Royal Lancaster Hotel, London, England, November 25-27, 1982. Contact: Dr. M. Seymour, Programme Co-ordinator, 22 Devonshire Place, London W1N 1PD, England.

December/Décembre

The Sri Lanka Dental Association's 50th Anniversary, Colombo, December 4-6, 1982. Contact: Dr. L.S.W. Dassanayake, Chairman, Organising Committee, Sri Lanka Dental Association, Professional Centre, 275/5, Baudhaloka Mawartha, Colombo 7, Sri Lanka.

1983-

Fédération Dentaire Internationale, 71st Annual World Dental Congress, Tokyo, Japan, November 14-20, 1983. Contact: Japan Dental Association, 1-20, Kudan-Kita 4-chome, Chiyoda-ku, Tokyo 102, Japan.

Fédération Dentaire Internationale, 72nd Annual World Dental Congress, Helsinki, Finland, August-September, 1984.

Future meetings of the ACFD AFDC are scheduled to take place in Halifax (1982), Dalhousie: Edmonton (1983), University of Alberta; and Winnipeg (1984). University of Manitoba.

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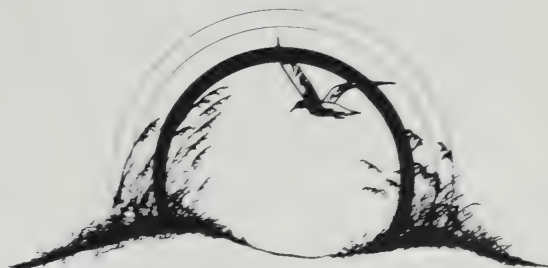
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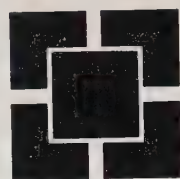
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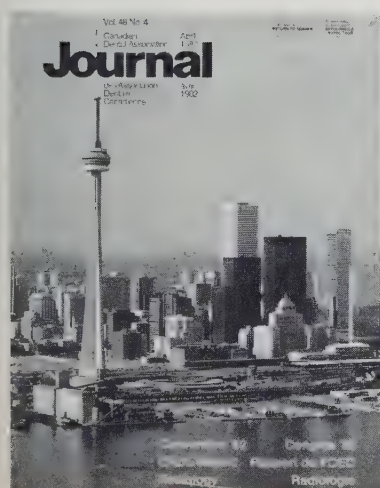
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Convention '82

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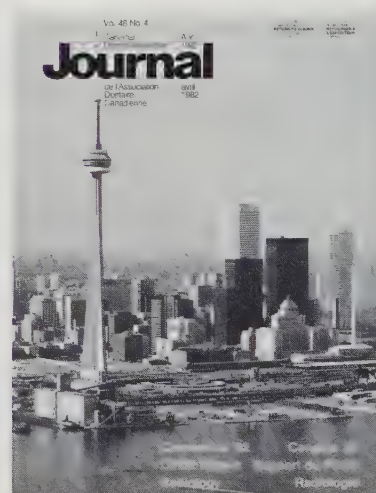
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La direction du Journal ne partage pas nécessairement les opinions qu'expriment ses collaborateurs à moins que l'Association Dentaire Canadienne ne les ait adoptées officiellement.

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Congrès '82
Rapport du FCED
Radiologie

MERCURY VAPOUR: THIS PROBLEM MUST BE SOLVED

Health professionals. That is what we call the dental team — assistant, receptionist, dental hygienist, dentist — workers jointly fighting the common enemy — poor health. But it is a wry state of affairs when, as we have discovered, the drugstore below the dental office has the same mercury vapour level as does the adjacent physician's office.

Since 1972 many warnings have been issued about heavy metal poisoning, especially among certain occupations or in certain localities. Dental offices are probably now the most widespread users of mercury since many industries have either stopped using it or take stringent precautions. Why? Because modern analytical methods have measured mercury vapour levels, and modern diagnostic tools have found evidence of heavy metal effects.

Much has been discovered in the last five to ten years and is just now reaching medical and industrial hygiene practice. In dentistry, for example, it is not widely known that silver amalgam dust gives off mercury vapour.

The dental team has an internal responsibility. The assistant who causes much of the mercury contamination must be supported by all others as she prevents and controls this problem. The dentist must encourage, assist and direct the general office practice against occupational hazards. The dental assistant usually has higher blood levels of mercury than the dentist and suffers as much, if not more, than the dentist. The dentist is probably exposed over a longer time to low level concentrations, and is affected after he/she is 50 or so.

But you say, there really is no problem. Why I feel fine as did my uncle, or my Dad and he was in practice for 30 years. At worst, talking to dentists about mercury poison-

ing, especially chronic effects, is like trying to persuade a drunk in a bar to give up drinking. It is hardly the right time or place to try.

The evidence is plain. A sizeable percentage — ten percent or more of dentists — shows signs associated with chronic mercury exposure and female dentists have obstetric problems associated with conditions of dental practice. No long-term or in-depth studies of dental assistants has been reported.

Mercury vapour as a long term hazard is acknowledged in industrial hygiene as a hazard and is regarded very seriously. Hospitals and chemical laboratories are now places where serious problems may exist. Dental offices and locations have had many surveys done, none of which show negligible amounts of mercury vapour present.

But what is astonishing in the dental situation is the simplicity and low cost of preventive methods and the failure to put them into effect. It is not a matter of fact, but a matter of persuasion and priorities.

The problem *may* be solved: informed dentists do not dismiss the problem, or just use a disposable capsule system as a token gesture. The problem *can* be solved — informed dentists, health services and the Armed Forces are doing so. The problem *must* be solved — all dental associations have begun warning members; some provinces can anticipate regulation by government if conditions do not change. The problem *will* be solved — by the health professionals looking after themselves for a change.

*Dr. R.H. Roydhouse,
Faculty of Dentistry,
University of British Columbia,
Vancouver, B.C.*

LES VAPEURS DU MERCURE: UN PROBLÈME À RÉSOUDRE

Les professionnels de la santé. Ainsi se nomme l'équipe dentaire qui se compose d'assistantes, de réceptionnistes, d'hygiénistes dentaires et de dentistes, tous des travailleurs qui s'unissent pour lutter contre un ennemi commun, la maladie. Cependant, combien est-il navrant de découvrir que la pharmacie située à l'étage au-dessous du cabinet dentaire contient le même taux de vapeur de mercure que le cabinet du médecin voisin.

Depuis 1972, on a émis plusieurs avertissements touchant l'intoxication par les métaux lourds, surtout dans certains milieux et dans certains métiers. Présentement, les dentistes sont probablement les plus grands consommateurs de mercure, étant donné que plusieurs industries ont cessé d'utiliser ce métal ou pris des mesures restrictives à son sujet. En effet, grâce aux méthodes d'analyse modernes, on peut maintenant mesurer le taux de vapeur de mercure et, suivant les instruments de diagnostic actuels, on voit les dommages que les métaux lourds peuvent causer à la santé. Au cours des cinq à dix dernières années, on a fait plusieurs découvertes qui, maintenant seulement, sont communiquées aux cabinets médicaux et aux responsables de l'hygiène dans les industries. En dentisterie, par exemple, on ne sait guère que la poussière d'un amalgame d'argent dégage de la vapeur de mercure.

Les membres de l'équipe dentaire doivent s'entraider. L'assistante qui est responsable en grande partie de la contamination par le mercure doit être appuyée par tous les autres lorsqu'elle tente de prévenir ce problème ou de le résoudre. Le dentiste doit encourager, aider et diriger son personnel afin d'éliminer les dangers liés à la profession. Ordinairement, l'assistante dentaire a dans son sang un taux de mercure plus élevé que celui du médecin et en souffre autant, sinon plus que lui. Exposé à des taux de mercure plus bas, mais pendant une plus longue période, le dentiste commence habituellement à en ressentir les méfaits après avoir atteint 50 ans.

Certains diront qu'il n'y a vraiment pas de problème, qu'ils se sentent aussi bien portants que leur oncle ou leur

père qui ont pratiqué plus de 30 ans. Au pire, parler aux dentistes de l'intoxication par le mercure et surtout des conséquences graves qui s'ensuivent, correspond à tenter de persuader un ivrogne dans un bar de cesser de boire. Ce n'est guère le temps ni le lieu appropriés.

Pourtant les preuves sont là. Un pourcentage important de dentistes, soit dix pour cent ou plus, présentent des symptômes associés à l'exposition continue au mercure, et les femmes dentistes ont des problèmes de grossesse liés aux conditions prévalant dans les cabinets dentaires. On ne sache pas qu'on ait fait des études sérieuses à long terme dans le cas des assistantes dentaires.

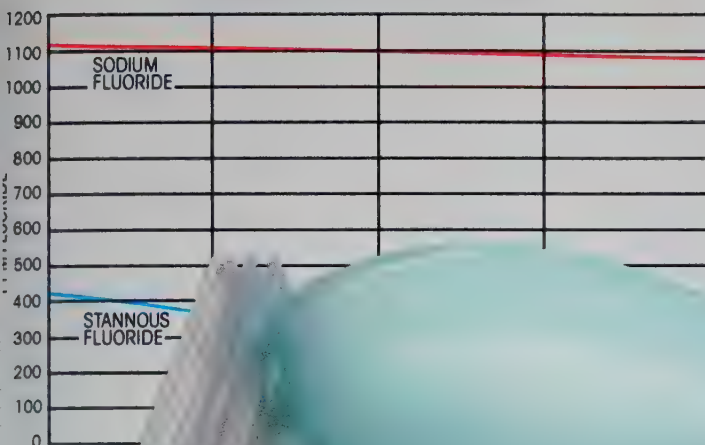
On reconnaît que, dans les milieux industriels, la vapeur de mercure constitue un danger très grave. Les hôpitaux et les laboratoires de chimie peuvent avoir des problèmes sérieux à ce sujet. Quant aux cabinets dentaires auprès de qui on a fait des enquêtes, tous contiennent des vapeurs de mercure en quantité qu'on ne saurait négliger.

Fait étonnant à constater, bien qu'il existe des méthodes de prévention simples et peu coûteuses pour les milieux dentaires, on y a rarement recours. Il ne s'agit pas d'une question de fait, mais d'une question de conviction et de priorité.

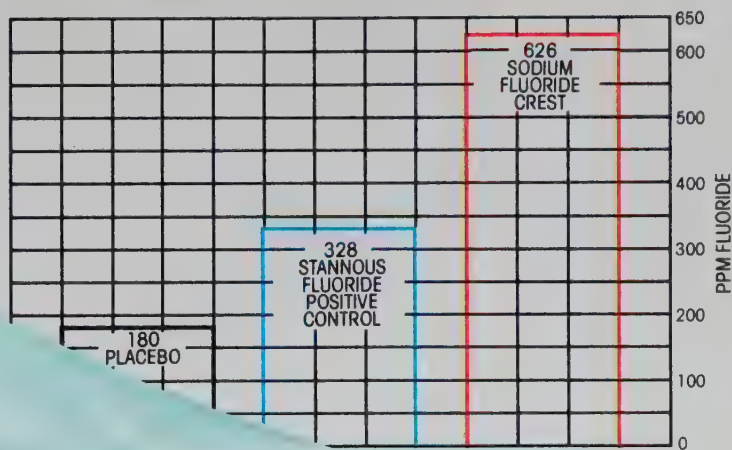
Le problème *pourra* être résolu: les dentistes prévenus ne cherchent pas à l'ignorer ou à utiliser seulement des capsules jetables pour prouver leur bonne conscience. Le problème *peut* être résolu: les dentistes avisés, les services de santé et les Forces armées en sont une preuve. Le problème *doit* être résolu: toutes les associations dentaires ont commencé à prévenir leurs membres; dans certaines provinces, on peut prévoir que le gouvernement imposera un règlement si les conditions ne changent pas. Le problème *sera* résolu: et il le sera grâce aux professionnels de la santé qui, pour changer, y verront eux-mêmes.

*Dr. R.H. Roydhouse,
Faculté de dentisterie,
Université de la Colombie-Britannique,
à Vancouver.*

AVAILABLE FLUORIDE OVER TIME (MONTHS)



COMPARISON OF FLUORIDE UPTAKE IN DECALCIFIED ENAMEL



MORE FREE FLUORIDE GIVES TODAY'S CREST MORE FIGHT THAN EVER BEFORE



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Today's Crest supplies 3 to 5 times more free fluoride to the tooth.³ More importantly, a new study by Dr. M. J. Mobley⁴ shows that this fluoride is taken up by decalcified enamel at nearly twice the level of previous Crest. It has been suggested that a high level of free fluoride in incipient carious lesions accelerates the natural remineralization process.⁵⁻⁸

This helps explain why Crest gives your patients more fight than ever before.

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Crest's unique active/abrasive formula is now available in a third flavour, a translucent blue gel. It's an excellent chance for improved compliance, particularly with your younger patients! No wonder Crest still leads in good dental health for the whole family.

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Crest



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anesthetic
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TAKE NO CHANCES WITH YOUR
PATIENT'S SENSITIVE TEETH

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THE NO.1 TOTAL THERAPY FOR HOME
TREATMENT OF SENSITIVE TEETH

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Over 13 years of clinically documented efficacy has made Sensodyne the dentifrice of choice of 92% of all dentists.

Composite clinical findings confirm that Sensodyne is highly effective as a dentifrice that cleans teeth and soothes pain.

HIGH DEGREE OF EFFICACY

- Positive therapeutic gain in 9 out of 10 patients
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- Early onset of relief — often in less than a week (*Sensodyne's effectiveness starts with the first brushing and builds up with continued use*)

PROVEN SAFETY *in over 20 years of widespread dental use*

- Comparable abrasion levels —

no damage to enamel or dentin (*RDA tests have shown Sensodyne compares in abrasivity to other leading toothpastes.*)

EXCELLENT PATIENT ACCEPTANCE

- New pleasant flavour encourages daily use
- Excellent enamel polishing qualities — removes plaque
- Good cleaning, foaming attributes (*an excellent substitute for a previously used cosmetic toothpaste*)

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Sensodyne toothpaste/
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COLGATE INTRODUCES A BREAKTHROUGH IN TOOTHPASTE FORMULATION.

TWO FLUORIDES IN ONE TOOTHPASTE.

New Colgate™ is the first and only toothpaste in Canada to combine the two fluoride compounds now most widely used to provide superior caries reduction.

In New Colgate, (0.76%) sodium monofluorophosphate and (0.1%) sodium fluoride have been incorporated in a hydrated alumina base. And a 3-year clinical study conducted in England,* confirms that this combination provides superior protection when compared to a single fluoride formula with sodium monofluorophosphate (0.76%).

The clinical results lend support to the recommendation made by a team of experts reporting on the U.S. National Caries Program,** that different combinations of fluorides, bases, etc. should be studied "to determine the combination that is most effective in preventing caries."

In summary, the clinical trial provides evidence that Colgate's combination of fluorides gives superior caries protection. We urge you to recommend the only product that combines two fluorides in one toothpaste.

New Colgate.

*Published in the British Dental Journal, October, 1980.

**Evaluation of the National Institute of Dental Research National Caries Program. Volume 1, November, 1979, Page 56.



"Colgate Toothpaste contains sodium monofluorophosphate and sodium fluoride which are, in our opinion, effective decay preventive agents and are of significant value when used in a conscientiously applied program of oral hygiene and regular professional care."
Canadian Dental Association.

Holistic Dentistry Not "Quackery"

There is often a misuse or misinterpretation of the term holistic whether applied to dentistry or any other health profession. All too often it is taken to mean "whole body" and not "whole person". A person has a spirit, mind and a body and not simply a body; the total integration of all three is hard to deny.

It is the opinion of people who advocate the concept of holistic health care that our present system has become too atomistic, dealing with individual parts and not the total person. Any health professional who proclaims himself to be holistic because he is dealing with the whole body and not simply localized disease is not truly holistic if he is neglecting the effects of any treatment he may render on the mental and spiritual health of the person.

This is not to say that every health professional needs to be a physician, psychiatrist and minister but simply that he consider the feelings of the patient toward his disease. Rather than a dentist imposing his standards of what he feels is ideal on each person, he should be more considerate of what the patient finds acceptable after all the alternatives have been considered.

Because of the connotation the word holistic carries with it, a better term to describe this kind of dental practice might be Health Centered Dentistry; health meaning the overall well being of a person and not simply the absence of disease.

As for the treatment modalities used by some dentists referred to as being holistic, one could say, at the risk of being too general, that they are non-invasive, reversible procedures. If the results are only placebo but have helped someone in some way then they are beneficial. After all, the efficacy of our so called orthodox procedures is greatly due to placebo. At what point is the efficacy considered to be scientifically proven? Was the efficacy of Thalidamide proven before it was used clinically?

It was Confucius who said "the mind is like a parachute, it functions only when it is open." In order to grow we must use our imaginations, keep our minds open and not be too quick to call something quackery. People tend to be "down on" what they are not "up on."

*Dr. Ron Beaton
Richmond, B.C.*

Commends Book Review by Price

I must commend Dr. Colin Price of the University of British Columbia for his excellent book review of "Exercises in Dental Radiology" by Kastle and Langlais, W.B. Saunders, Toronto in J. Canad. Dent. Assoc., December, 1981.

How nice it was to note that Dr. Price started his review by thoroughly reading the authors' preface. What better way to find out the reason for the book being written? He then covered the contents in great detail to determine whether the authors had

done what they intended to do. He then gave his conclusions.

Where portions of "Exercises in Dental Radiology" were well done, he said so and where he felt that criticism was justified, he prefaced his remarks with "It is never possible to please all the people all the time." How professional!

*C.R. Castaldi, D.D.S., M.S.D.
Professor and Head
Department of Pediatric Dentistry
University of Connecticut*

Authors Should be Identified

I feel the author of any article in the Journal should be identified, along with a description of this person. This would allow one to assess the validity of statements made. In particular, I am disturbed that the article, "Don't be afraid of me," Howie Rocket says, seems to have been written either by Howie Rocket, or by an advertising agency.

In a scientific journal, I am sure I would have to meet more stringent standards to have you allot three pages to my publication!

*James J. Hyland
DDS, B.Sc.*

Editor's note:

The article was written by a Journal staff writer responding to a motion from the CDA Executive Council "that the Editorial Board be asked to consider developing articles providing information on dental care systems for publication in the CDA Journal."

Nine-digit Numbering System Major Leap into Computer Age

The Canadian Dental Association has cleared the track for a major leap forward into the computer age by the nation's dentists while at the same time striking a stiff blow at overuse of social insurance numbers.

The "unique identification number" — brainchild of the Ontario Dental Association — went into use at the start of 1982 throughout Ontario and is slated to be operative in New Brunswick and Nova Scotia before the end of the year.

The new nine-digit numbering system is designed to replace the social insurance number now requested on the CDA-approved standard dental claim form.

"We are hopeful the new system will be in place across Canada by 1983," observed Dr. Ronald Bartalos, an Ancaster, Ont., dentist who is chairman of the sub-committee on Dental Programs and Services of the CDA's Council on Health Care.

"New system will be in place by 1983"

Although other provinces have not yet been as specific as New Brunswick and Nova Scotia in stating that the new system will be implemented this year, Dr. Bartalos said there appears to be general endorsement for the plan.

Under the nine-digit numbering system, approved by the CDA Board of Governors last August, the first two digits will be allocated to identify the province in which the dentist is licensed. The next five digits are assigned by the provinces (probably each dentist's licence number) with the last two used at the discretion of the provinces for computer purposes.

In Ontario, the ODA has decided to incorporate the number assigned each dentist at the time he receives his licence to practice and other provinces will likely adopt the same system.

ODA executive-director John Gillies predicted the unique identification number will ultimately have a broader use than for dental claim forms because "it identifies the dentist by sequence of graduation within his province and identifies him by the province where he's practising." He noted there are two extra digits which provincial dental associations may use to designate whatever they wish — like the specialization category of members.

"As more and more dental organizations and dentists themselves get involved in electronic data processing, it's essential that there be a given number that identifies them," Mr. Gillies said.

"It will be very useful to have a number unique to the dental profession to be used throughout Canada," he continued. "It's the same principle as the use of a numerical code to identify teeth."

The unique identification number began to take shape in 1980 in response to objections from increasing numbers of dentists about use of their social insurance numbers (SIN) for identification purposes on standard dental claim forms when dealing with third party insurance carriers.

Added impetus was generated when the Kreber Commission on Confidentiality of Health Records was set up and the federal government began examining use of SIN numbers for other than their original purpose.

The numbering system was developed by the Prepayment Advisory Committee of the Ontario Dental Association under chairman Dr. David

Sage of Woodstock and his predecessor, Dr. David Anderson of Windsor.

"Less than a half-dozen of our 4,500 members have reported any difficulty with the new system since it went into operation Jan. 1," Mr. Gillies noted.

Insurance companies "responding well"

The ODA executive-director said insurance companies have been responding well. And Dr. Bartalos of the CDA said most insurance companies would like to see the unique identification number adopted throughout the country.

But he stressed that although the CDA has issued a directive to all provinces seeking their cooperation, "no coercion or force is being applied."

The change creates no difficulties for the insurance companies and, consequently, they have had no qualms about accepting it. Their hope now is that it will be extended to all provinces as soon as possible in order to standardize procedures.

Jim Gill, past chairman of the Health Services Insurance Committee of the Canadian Life and Health Insurance Association (CLHIA), said many insurance companies have not been using any number in the past. But for those who did include the dentists' social insurance numbers, he stressed that the numbers were always kept confidential.

"One added convenience to the change is that the new unique identification number makes it easy for companies who used the SIN number to adjust their systems," Mr. Gill noted. "SIN numbers have nine digits, too."

Fluoride Implant: Is it Practical?

Researchers in the United States are on the verge of perfecting a fluoride implant which a top Canadian authority on community dentistry believes represents "a useful step forward" in slow-release technology.

But Dr. John Stamm, a professor in community dentistry at Montreal's McGill University and past-president of the Canadian Society of Public Health Dentists, is not so sure that the idea of attaching a small fluoride-filled pellet to a tooth is practical.

"There just isn't enough evidence that people will use such a device," said Dr. Stamm "and I don't think it will achieve the acceptable compliance level."

Little evidence "people will use device"

Dr. Dale Mirth, a research chemist in the caries program of the National Institute of Dental Research in Bethesda, Maryland, has pioneered the fluoride implant technology over the past seven years. He is now confident of success and believes the device could be on the market in four or five years.

The idea is to attach a small pellet with dental cement to the side of an upper first molar on the cheek-side. Shaped like a small bean that has been cut in half, the pellet is about the same size as a molar but only about one-third as high.

Fluoride is mixed with plastic in the core of the pellet. It is surrounded by an outer membrane that controls the rate of fluoride release.

"With the device in place, fluoride is continually available in the saliva and in the mouth," Dr. Mirth explained. "It's like having fluoridated water in your mouth 24 hours a day."

He said this would "act to both strengthen the enamel and perhaps also to help repair any small cavities that had started to develop."

Six-month study underway

A six-month study of the fluoride implant is slated to get under way shortly in Baltimore schools to determine that it releases fluoride properly and does not cause significant irritation. This is to be followed by extensive dental decay studies which probably will last two or three years.

But to date, only a small-scale study has been carried out. Two of the devices were placed on the first molars (one on each side) of 11 men. They wore them for five weeks to show that fluoride would be released and that they would be safe to use.

Volunteers had some irritation

Dr. Mirth noted that in a community with fluoridated water, the level of fluoride in the mouth is normally very low — about .04 parts per million. With the device in place, it was found that there was about one to two parts per million in the saliva or about a 20 to 30-fold increase in fluoride levels.

About 25 per cent of the study volunteers said they had some irritation from the device rubbing on the

cheek but the researchers found that when it was left in place, the irritation tended to disappear. When the experiment ended, 90 per cent of the participants said they would wear a fluoride device if it did prove to be effective in preventing tooth decay.

The devices which have been used for study purposes are quite expensive because they are still all hand-made by the Southern Institute in Birmingham, Alabama. But Dr. Mirth expects mass production will cut the cost to somewhere between \$3 and \$10 by the time they are ready to go on the market.

Implant will last six months

The objective is to produce a device that will last six months. This will allow users to have a new one attached when they see their dentists for twice-a-year checkups.

Two types of implant devices are being prepared for the next phase of the study. One will contain 10 milligrams of fluoride and release about .05 milligrams of fluoride per day. The other will contain 19 or 20 milligrams and release 0.1 milligrams per day.

Even if damaged, Dr. Mirth said the devices are manufactured in such a way that not all the fluoride would spill out at once. And even if it could, he added, there would be no danger to the health of the user.

McGill's Dr. Stamm agreed and pointed out that any user could take a one time consumption of the entire fluoride content of the device and still be well below the fluoride danger levels.



Dr. Gene D. Solmundson was recently elected president of the Manitoba Dental Association. A University of Manitoba graduate, he is past president of the Winnipeg Dental Society and was vice-president of the Manitoba Dental Association in 1981.

Others on the board are: Dr. Robert Baker, past president; Dr. Ussher Claman, vice-president; Dr. John Dillon, registrar; Drs. Ted Hechter, Eugene Shahariw and Orville Heschuk, Mr. David Snitka, consumer representative and Ms. Joanne Gilbert, auxiliaries representative.

Obituaries

FLOY, M.S.: Dr. Floy of Burlington, Ontario was a life member of the CDA.

GODIN, Theo: Died November 11, 1981. Dr. Godin of Campbellton, New Brunswick graduated in 1930 from the University of Montreal. He was a life member of the CDA and New Brunswick Dental Society.

LEGER, E.J.: Graduated University of Maryland, Baltimore, 1926. Was a life member of the CDA.

JOHNSON, W.F.: Died November, 1981. Graduated Marquette University in Milwaukee, Wisconsin, 1953.

VROMAN, CLINTON HARRY: Died December, 1981. Graduated University of Minnesota, 1916. Practised in Burnaby, British Columbia until 1962.

Motrin (ibuprofen)

Product Information

Action: Ibuprofen has demonstrated anti-inflammatory, analgesic and antipyretic activity in animal studies designed to specifically demonstrate these effects. Ibuprofen has no demonstrable glucocorticoid effect.

Following a single 200 mg dose of ibuprofen in humans, useful blood levels were demonstrable in 45 minutes and still present in six hours but at barely detectable levels. Peak levels occurred at approximately one hour after ingestion. Levels were lower when taken in conjunction with food.

Ibuprofen is rapidly metabolized and eliminated in the urine. The excretion of ibuprofen is virtually complete 24 hours after the last dose. The serum half-life of ibuprofen is 1.8 to 2 hours. There is no evidence of drug accumulation or enzyme induction.

Ibuprofen has been found to be less likely to cause gastro-intestinal bleeding in doses usually used than is acetylsalicylic acid.

Clinical trials in man have shown activity of a dose of 1200-1800 mg of ibuprofen daily to be similar to that of 3.6 grams of acetylsalicylic acid daily.

Indications and Clinical Uses: Motrin (ibuprofen) is indicated for the treatment of rheumatoid and osteoarthritis. Motrin is also indicated for the relief of mild to moderate pain, accompanied by inflammation, in conditions such as musculo-skeletal trauma and post-dental extraction. Motrin is also indicated for the relief of pain associated with dysmenorrhea.

Contraindications: Ibuprofen should not be used in patients who have previously exhibited hypersensitivity to it, or in individuals with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to acetylsalicylic acid or other nonsteroidal anti-inflammatory agents. (see WARNINGS).

Ibuprofen should not be used during pregnancy, in nursing mothers or in pediatric patients because its safety under these conditions has not been established.

Warnings: Anaphylactoid reactions have occurred in patients with known A.S.A. hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported in patients receiving ibuprofen. Peptic ulceration, perforation, or severe gastrointestinal bleeding can have a fatal outcome, and although few such reports have been received with ibuprofen, a cause and effect relationship has not been established. Ibuprofen should be given under close supervision to patients with a history of upper gastrointestinal tract disease.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in colour vision have been reported. If a patient develops such complaints while receiving ibuprofen, the drug should be discontinued and the patient should have an ophthalmologic examination.

Fluid retention and edema have been reported in association with ibuprofen, therefore, the drug should be used with caution in patients with a history of cardiac decompensation or renal disease.

Ibuprofen, like other nonsteroidal anti-inflammatory agents, can inhibit platelet aggregation but the effect is quantitatively less and of shorter duration than that seen with acetylsalicylic acid. Ibuprofen has been shown to prolong bleeding time (but within the normal range) in normal subjects. Because this prolonged bleeding effect may be exaggerated in patients with underlying hemostatic defects, ibuprofen should be used with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients on ibuprofen should be cautioned to report to their physicians signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

When ibuprofen is added to the treatment program of patients who have been on prolonged corticosteroid therapy, and it is decided to discontinue this therapy, the corticosteroid should be tapered slowly to avoid exacerbation of disease or adrenal insufficiency.

Aseptic meningitis has been reported in connection with ibuprofen therapy in patients with systemic lupus erythematosus. Such patients may also develop hypersensitivity reactions to ibuprofen such as fever, rash or abnormal liver function more often than those with other disorders. Caution should therefore be exercised when considering ibuprofen therapy for patients with systemic lupus erythematosus.

Drug Interactions

Coumarin-type anticoagulants - Several short-term controlled studies failed to show that ibuprofen significantly affected prothrombin times or a variety of other clotting factors when administered to individuals on coumarin-type anticoagulants. However, because bleeding has been reported when ibuprofen and other nonsteroidal anti-inflammatory agents have been administered to patients on coumarin-type anticoagulants, the physician should be cautious when administering ibuprofen to patients on anticoagulants.

A.S.A.: Animal studies show that A.S.A. given with nonsteroidal anti-inflammatory agents including ibuprofen yields a net decrease in anti-inflammatory activity with lowered blood levels of the non-A.S.A. drug. Single dose bioavailability studies in normal volunteers have failed to show an effect of A.S.A. on ibuprofen blood levels. Correlative clinical studies have not been done.

Adverse Reactions: The following adverse reactions have been noted in patients treated with ibuprofen:

Note: Reactions listed below under Causal Relationship Unknown are those which occurred under circumstances where a causal relationship could not be established. However, in these rarely reported events, the possibility of a relationship to ibuprofen cannot be excluded.

Gastrointestinal: The adverse reactions most frequently seen with ibuprofen therapy involve the gastrointestinal system.

Incidence 3 to 9%: nausea, epigastric pain, heartburn, incidence 1 to 3%: diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the gastrointestinal tract (bloating or flatulence).

Incidence less than 1%: gastric or duodenal ulcer with bleeding and/or perforation, gastrointestinal hemorrhage, melena, hepatitis, jaundice, abnormal liver function (SGOT, serum bilirubin and alkaline phosphatase).

Central Nervous System:

Incidence 3 to 9%: dizziness

Incidence 1 to 3%: headache, nervousness

Incidence less than 1%: depression, insomnia

Causal relationship unknown: paresthesias, hallucinations, dream abnormalities

Dermatologic:

Incidence 3 to 9%: rash (including maculopapular type)

Incidence 1 to 3%: pruritis

Incidence less than 1%: vesiculobullous eruptions, urticaria, erythema multiforme

Causal relationship unknown: alopecia, Stevens-Johnson syndrome.

Special Senses:

Incidence 1 to 3%: tinnitus

Incidence less than 1%: amblyopia (blurred and/or diminished vision, scotomata and/or changes in colour vision). Any patient with eye complaints during ibuprofen therapy should have an ophthalmological examination (see PRECAUTIONS).

Causal relationship unknown: conjunctivitis, diplopia, optic neuritis.

Metabolic:

Incidence 1 to 3%: decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Hematologic:

Incidence less than 1%: leukopenia and decreases in hemoglobin and hematocrit

Causal relationship unknown: hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes (e.g. purpura, epistaxis, hematuria, menorrhagia)

Cardiovascular:

Incidence less than 1%: congestive heart failure in patients with marginal cardiac function, elevated blood pressure

Causal relationship unknown: arrhythmias (sinus tachycardia, sinus bradycardia, palpitations).

Allergic:

Incidence less than 1%: anaphylaxis (see CONTRAINDICATIONS).

Causal relationship unknown: fever, serum sickness, lupus erythematosus syndrome

Endocrine:

Causal relationship unknown: gynecomastia, hypoglycemic reaction.

Renal:

Causal relationship unknown: decreased creatinine clearance, polyuria, azotemia.

Symptoms and Treatment of Overdosage: A nineteen month old child weighing 12 kg ingested from 2800 to 4000 mg and presented with apnea, cyanosis and responded only to painful stimuli. Oxygen and parenteral fluids were given and at 12 hours she appeared completely recovered. Two other children (10 kg each) ingested 1200 mg of ibuprofen each and there were no signs of acute intoxication or late sequelae. A 19 year old male who had ingested 8000 mg of ibuprofen reported dizziness, and nystagmus was noted. He recovered with no reported sequelae after parenteral hydration and three days' bed rest.

In cases of acute overdosage, the stomach should be emptied by vomiting or lavage, though little drug will likely be recovered if more than an hour has elapsed since ingestion. Because the drug is acidic and is excreted in the urine, it is theoretically beneficial to administer alkali and induce diuresis.

Dosage and Administration: Rheumatoid arthritis and osteoarthritis: The initial daily dosage in adults is 1200 mg divided into 3 or 4 equal doses. Depending on the therapeutic response, the dose may be adjusted downward or upward. The daily dosage should not exceed 2400 mg.

Maintenance therapy, once maximum response is obtained, will range from 800 to 1200 mg per day.

Mild to moderate pain associated with inflammation, dysmenorrhea: 400 mg repeated as required every 4 to 6 hours. The daily dosage should not exceed 2400 mg.

Children: Due to the lack of clinical experience, ibuprofen is not indicated for use in children under 12 years of age.

Supplied: 200 mg (yellow), 300 mg (white), 400 mg (orange) sugar-coated tablets and 600 mg (peach) film-coated tablets in bottles of 100 and 1000.

Product monograph available on request.

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Ten questions your patients may ask about the new low-calorie sweetener, NutraSweet™

Recently, foods and beverages made with a completely new kind of food sweetener, NutraSweet* aspartame sweetener, were introduced in the marketplace. Here are the answers to some of the most frequently asked questions about this revolutionary new product.

1. Exactly what is NutraSweet?

NutraSweet is not a sugar. NutraSweet is a sweet, nutritive substance made of protein components like those found naturally in most foods. It is a sweet compound of two amino acids, aspartate and phenylalanine.

2. What foods are made with NutraSweet?

A variety of foods are made with NutraSweet: carbonated soft drinks, pre-sweetened cereals, instant puddings and dessert toppings, flavored crystal beverages and chewing gum.

Equal® (Égal® in French), the new low-calorie tabletop sweetener in packets and tablets, is also made with NutraSweet.

3. Can NutraSweet reduce calories in foods? NutraSweet sweetens with far fewer calories than sugar. For example, a teaspoon of sugar contains 16 calories. NutraSweet delivers equivalent sweetness with only 1/10 of one calorie. That means, in some foods made with NutraSweet, calories may be reduced as much as 95 percent (see chart below).

4. Can children have foods made with NutraSweet?

Unlike many non-nutritive sweeteners, NutraSweet has been clinically tested with people of all ages.** If a person consumes an amount of NutraSweet equivalent in sweetness to one teaspoon of sugar, he takes in 8.5 mg. of aspartate and 10.6 mg. of phenylalanine. By way of comparison, he takes in 50 times

these amounts when he drinks an 8 oz. glass of milk.

5. Are foods made with NutraSweet more nutritious? Sometimes. For example, a pre-sweetened cereal made with NutraSweet can offer more protein,



fiber, vitamins and minerals per serving than the same size serving made with sugar. That's because sugar's bulk and calories can be replaced with more cereal grain.

6. Can NutraSweet help reduce tooth decay? Too many sweets in the diet, combined with poor dental habits, contribute to tooth decay. While diet is only one factor, substituting foods made with NutraSweet for sugar-sweetened foods may help to reduce cavities.

Supporting this theory are studies conducted by the U.S. National Institute of Dental Research that showed use of NutraSweet was not associated with the formation of cavities in animals.***

7. Can persons with diabetes eat the foods made with NutraSweet? NutraSweet is wel-

come news for persons with diabetes because it is digested and utilized by the body as protein. That means some foods and beverages formerly high in sugar may soon be enjoyed because with NutraSweet most beverages will be totally sugar-free and other foods will be significantly reduced in carbohydrates.

8. Can pregnant women use NutraSweet?

On the basis of animal and clinical studies, Health and Welfare Canada concluded that NutraSweet does not present an additional risk to pregnant women. The amino acids from NutraSweet

will be less than 1% of the total protein consumed over a day. And, consuming foods and beverages made with NutraSweet is just like eating other foods containing the same protein components.

9. Does NutraSweet really taste like sugar?

In two separate studies conducted at a leading university in New York, people were fed a diet that contained sugar-sweetened foods. Occasionally, foods sweetened with NutraSweet were substituted without the subjects' knowledge. Most subjects could not tell the difference between the foods sweetened with NutraSweet and the same foods sweetened with sugar.

10. Can NutraSweet help me control my weight?

Eating foods made with NutraSweet allows you to reduce your daily calorie intake, yet still satisfy your sweet tooth. And because foods made with NutraSweet taste like high-calorie foods, they can help make even a restrictive diet more palatable.

*NutraSweet is a brand name of G.D. Searle & Co. for the sweetener aspartame (APM).

**NutraSweet contains phenylalanine. Physicians with phenylketonuric patients may request additional information on foods made with NutraSweet by calling (1-800) 268-1120 and in British Columbia (112-800) 268-1120.

***Copies of this study may be obtained by calling the 800 telephone number mentioned above.

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Compare the difference in calories:

Food	Containing Sugar	Containing NutraSweet
Hot chocolate (8 oz.)	116 calories	64 calories
Carbonated soft drink (10 oz.)	120 calories	1 calorie
Gelatin dessert (½ cup)	81 calories	10 calories
Whipped topping (4 Tbsp.)	56 calories	28 calories
Chocolate pudding (½ cup)	150 calories	75 calories
Milk shake (1½ cups)	284 calories	135 calories

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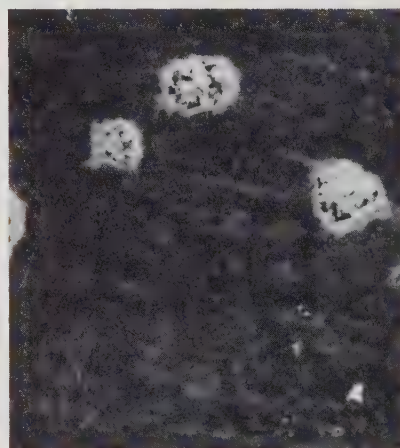
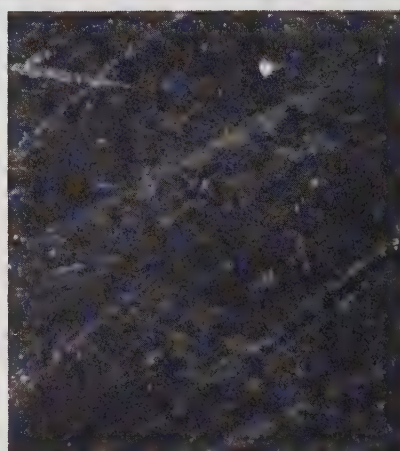
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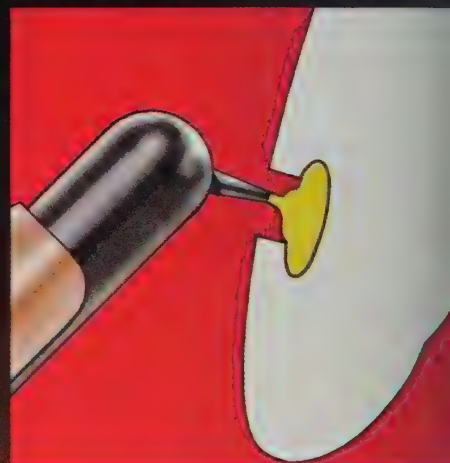
Cures through tooth structure. PRISMA-LITE™ rays pass through tooth structure to polymerize undercut areas.

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Now PRISMA-FIL™ COMPULES offer precise placement, minimum porosity, minimum waste...at a price competitive with bulk syringes. The syringe provides superlative control, reaches all quadrants of the mouth. And there is no inconvenient travelling back



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The PRISMA-FIL COMPULE complete package contains 200 pre-dosed tips, composite syringe, two bottles of PRISMA-BOND™ bonding agent, and all accessories.

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COMPULES load easily into snap-on applicator.

Tip of syringe allows for quick placement of PRISMA-FIL COMPULES.

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Research Conference, Halifax, June 19-21

How do bones and teeth accrue basic calcium phosphate salt that permit them to become hard tissues that form our skeleton and masticatory organs?

What is the nature of the organic matrix of these tissues that enables them to selectively mineralize?

What is the nature of the inorganic components of these tissues?

How do these tissues heal? How do they acquire their structural form?

The answers to these questions remain elusive.

In spite of the rapid progress in many areas of biology, efforts at understanding the mechanisms of mineralization have met with stubborn resistance. Yet, if we are to move in the direction of prevention and improved treatment of periodontal disease, dental caries, osteoporosis and other hard tissue problems, we must have a better understanding of the cellular mechanisms that permit these tissues to mineralize, resorb and form.

Research involving hard tissues has increased in tempo over the past decade. Much of this has resulted from the merging of work from different basic disciplines.

Joining the morphologists with their sophisticated ultra-structural approach have been the molecular scientists — the protein and carbohydrate chemist, the endocrinologist, the crystallographer, the immunologist, the geneticist and others.

There is an obvious need to synthesize work in such diverse disciplines. With this in mind 'The XII Biennial Conference on Research' was planned with the central theme of "Mechanisms of Calcification."

The objectives of the Conference are twofold: 1) update current knowledge and research relating to calcification mechanisms and 2) to apply new knowledge to dental clinical problems.

Part I:

Three basic areas will be discussed

by three outstanding investigators.

"Mechanisms of Calcium and Phosphate Homeostasis" is to be discussed by Dr. Harold Copp, professor of Physiology at the University of British Columbia, Vancouver, B.C.

Dr. Copp is world-renowned for his contributions in bone physiology and problems of calcium homeostasis. He was one of the first to study the metabolism of the bone seeking fission projects such as strontium⁹⁰ and to stress their significance as a health hazard in the atomic age.

He is known for his studies on the effects of severe phosphorus deficiency. He is also the discoverer of a previously unrecognized hormone called calcitonin, which is involved in the regulation of the calcium in body fluids, along with parathyroid hormone and vitamin D. His honours are many, his credentials impeccable.

"The Nature and Role of the Organic Matrixes of Bone Tissue and Teeth" will be discussed by Dr. Johan Heersche from the University of Toronto.

Dr. Heersche was born and educated in The Netherlands. His Ph.D. is from the University of Leiden, The Netherlands, 1969. He is currently the professor of the MRC Group in Periodontal Physiology in the Department of Biological Sciences, Faculty of Dentistry, University of Toronto.

He has made a definitive study of the endocrinology of calcium metabolism and has published widely in this field. His expertise extends to bone culture studies and the mechanisms of bone resorption. Dr. Heersche will deal with the mechanism by which vitamin D and the parathyroid hormone exert their effect on cellular elements involved in calcification.

"Composition and Crystalline Structure of the Inorganic Phase of Bone Tissue and Teeth" will be discussed by Professor Poul Grön from Harvard School of Dental Medicine and the Forsyth Dental Center.

Dr. Grön's studies on the inorganic composition of teeth calculus and saliva as well as fluoride-enamel interactions have received wide recog-

nition. He will review the crystalline structure, the physical and chemical properties of the hydroxyapatite crystal system.

Part II:

In addition to the basic symposium on application of research to clinical dentistry there will be three speakers that will highlight the application of basic findings to clinical problems.

Professors E. Harvold and D.G. Woodside from the University of Toronto will speak on "The New Treatment of Jaw Malformations Based on Muscle Bone Interaction."

They will discuss recent findings which have resulted in improved clinical management of jaw malformations based on the understanding of muscle bone physiology. Dr. Woodside will present the material.

Professor L. Silverstone will discuss "The Remineralization Mechanisms of Enamel." Dr. Silverstone is Professor and Head of Cariology in the University of Iowa.

This subject has received a good deal of emphasis since the discovery that incipient enamel lesions can remineralize. The factors which promote and control mineralization will be discussed.

Professor G. Zarb of the University of Toronto will discuss "Tissue-Integrated Dental Prostheses." His lecture will deal with the timely subject of tissue implants and the current investigations which permit the rehabilitation of mutilated edentulous of fusing tissue integrated prostheses.

In addition to the formal program there will be a poster and presentation session by investigators from the 10 dental schools in Canada. Each faculty will be sending two research staff; one will be a novice investigator and the other a senior staff member.

In addition to the research component there will also be a symposium on teaching entitled "How People Learn". The speaker will be Professor Pascal from the University of Toronto and the Ontario Institute for Studies in Education.

Gordon Nikiforuk

Chairman of Conference

Glasgow Meeting Addresses Mercury Issue

Eight statements were accepted as the present position relating mercury usage to dental practice at a recent Glasgow conference.

There were 80 participants at the international meeting and the dentists, physicians and scientists heard 28 papers on occupational health and mercury effects.

The following are the statements agreed to:

1. We recommend that all dental personnel (including dental students and dental auxiliaries) should, in the course of their training, be made aware of the potential hazards of mercury and of the measures available for the reduction or avoidance of these hazards. Employers should be aware of their responsibility to maintain safe working conditions for their employees.
2. The hazards associated with the use of mercury have long been recognized in many industries and workplaces. This conference studied the potential occupational hazards of mercury in dental practice.
3. Mercury should always be used in ways which reduce its potential hazards.
4. Design of surgeries should eliminate or minimize factors contributing to the potential hazards. Useful recommendations have been offered by dental associations in many countries.
5. Packaging, storage, handling and disposal of mercury and mercury-

containing material should be carried out in ways which do not contribute appreciably to potential environmental hazards in the workplace or elsewhere.

6. Advisory and monitoring services (including facilities to deal with accidental release of mercury) should be generally available.
7. There is need for further research into the biological effects of mercury, to establish objective indications of the consequences of exposure.
8. The development of alternative materials, not containing mercury, for restorative dentistry should be encouraged.

The conference papers dealt with various aspects. Tests for mercury levels in humans were considered at length, but little if any relationship was found with possible symptoms — except in those with very high levels. Disturbing general information was that eight of 400 Scottish dentists were being treated for possible chronic mercury effects. In the Delaware Valley (USA) 18 to 300 dentists have neurophysiological effects — slowing of peripheral nerve co-ordination; four of these had other disorders with possible neurologic effects; 30 (top 10 per cent with high levels) of these 300 showed differences in two of three neurophysiologic tests; dentists were over 50. Reports were analyzed from 1,600 female dentists concerning 2,300 pregnancies. The difference in perinatal mortality between dentists and others (19.5/1000) (7.5/1000) seemed to be significant, although a control group was difficult to find. When den-

tists who worked during pregnancy were compared with dentists who did not work a significant incidence of late abortion after 20 weeks was found (5.4 per cent working, 0 per cent non-working). Professor Goldberg of the University of Glasgow intimated that mercury in low levels seems to affect the haem enzymes.

In practical terms the conference emphasized the need for ventilation, the undesirability of carpets and the grave need for mercury liquid control to avoid spillage. Strenuous precautions among Japanese dentists were shown to bring mercury levels down to those of non-exposed persons.

Surveys of Western Canadian offices of interested dentists were presented by a UBC team and differences in office arrangements, furnishings and ventilation indicated that locales differ quite markedly in vapour present. Mercury samples in Great Britain (Warren) show that the workers in Northern Regions have a 40 per cent higher mercury concentration as compared with Southern regions.

In summary, this first conference did not dismiss the problem of mercury contamination, and did not identify clearly the exact effects of varying concentrations on humans. However, the unanimous acceptance of the preceding communique tells us the problem should be faced and eliminated by changes in dental workers' behavior and surroundings.

*R. H. Roydhouse,
Professor,
Department of Restorative Dentistry
University of British Columbia
Vancouver, B.C., Canada*

CFDE Recommendations on Priority Funding

A committee of the Canadian Fund for Dental Education (CFDE) has presented a series of recommendations on priority funding over the next five years to the CFDE board of trustees.

The Ad Hoc Granting Priorities Committee concluded that the "most urgent and timely category" for the fund to support is one made up of projects centered on developing and increasing the availability of independent research investigators capable of designing and conducting studies in the broad area of health planning.

Fund should support independent research

The committee suggested this category should include:

- fellowships for qualified health professionals wishing to prepare themselves for careers in health planning research,
- conferences, faculty exchanges and the like for researchers in these fields,
- deans' grants when used for closely related purposes,
- awards providing on a term basis (2-5 years) payment of a portion of the salary of a university staff appointee to allow the appointee to spend at least 50 per cent of his/her time learning and applying research procedures in related fields of investigation.

Recommendation Two

Of an equally high priority category, the committee said, are projects related to the actual designing and conducting of various types of

study within the field of dental health planning. A wide variety of studies would fall within this category.

Examples would include:

- dental manpower studies,
- epidemiology studies,
- studies re delivery systems,
- accessibility to dental care,
- educational systems related to health planning,
- studies re prevention of dental disease,
- special dental needs and provision of care for minority and handicapped groups.

Recommendation Three

The Committee considers it most important for the Fund to continue to attract active ongoing support from individual dentists, dental auxiliaries, dental associations and the dental industry.

Visible evidence of benefits to these individual donors from the projects which receive awards from the Fund is expected to help encourage this ongoing support.

High on a list of projects with visible benefits to the individual donors referred to above are those related to the quality of services rendered by the profession. For example:

- assistance in supporting continuing education programs and refresher courses for general practice dentists, for specialists and for auxiliaries,
- general practice residencies,
- public education programs designed to explain dental services and the value of dental health,
- upgrading of dental educators so they are qualified to conduct refresher and other types of continuing education programs,
- development of improved meth-

ods of accreditation which would help to ensure quality in the products of the educational systems.

Recommendation Four

It is a fact that there are areas in Canada where the populace has little or no access to the services of dental specialists. While the maldistribution of dentists in general practice as well as of specialists will no doubt always be a problem, the problem is likely to be lessened over the next few years as dentists in the urban centers find it increasingly difficult to keep their office hours filled with appointments. However, until any significant redistribution occurs, an acute shortage of dental specialists in certain areas has been identified and should, if possible, be alleviated.

The committee gives a high priority to support that will encourage dentists to qualify as specialists in specialties recognized by the Canadian Dental Association and for which the provincial licensing bodies have identified need within their respective jurisdictions. Commitments on the part of the dentists to provide service for a minimum period of time in designated underserved areas should be a factor in the trustees' consideration of the individual grant applications.

Typical awards could be for:

- fellowships for specialist training for applicants prepared to make service commitments,
- fellowships for upgrading of general practice dentists who are prepared to provide special services in areas not served by specialists,
- stipends for qualified teachers who are prepared to visit areas underserved by specialists and provide upgrading programs for the dentists in the community.

In the News

Recommendation Five

Although the committee did not suggest that support for student activities be necessarily increased at the present time, it did recommend that support for such student programs as the table clinic program at national conventions and the students' conference be continued.

The prime objectives for the Fund in continuing to support student activities should be to make the students aware of the Fund with its potential for rendering a unique service to the profession, along with their ongoing obligation to maintain and expand the services of the Fund.

Trustees Impressed

The Ad Hoc Committee was appointed by CFDE's board of trustees in 1980 to recommend granting priorities for the next five years. The trustees were "deeply impressed" with the thoroughness of the committee report and are confident the recommended granting priorities will be of "inestimable value" in their efforts to make the best possible use of the funds entrusted to their care.

The committee based its recommendations on a variety of assumptions, including the belief that there will be no significant alterations in the practice of dentistry over the next five years.

It also concluded there is little likelihood of the establishment of any new dental schools or a significant increase in the enrolment of the present 10 dental schools over the five-year period.

The committee said CFDE's resources will need to be increased significantly, in staff as well as dollars, with more donations necessary from foundations, corporations, governments and public interest groups.

It was also noted that the fund must continue to attract ongoing donations from individual dentists, dental auxiliaries, the dental industry and dental associations.

The Ad Hoc Granting Priorities Committee was comprised of Dr. William McIntosh (chairman), Dr.

Robert Dupont, Dr. Harold Hillenbrand, Dr. John Neilson, Mrs. Linda Strevens and Mr. Arthur Zwingerberger. CFDE board chairman Dr. James Guest has forwarded a personal letter of appreciation to each member for "such a worthwhile report."

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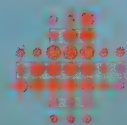
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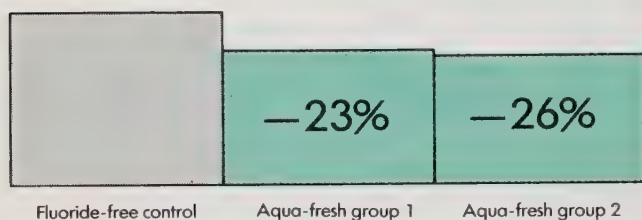


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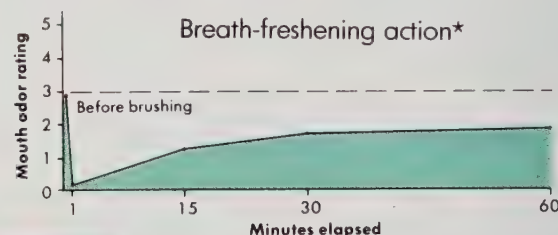


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Lower cast partial with Dalbo attachments on ceramic crowns. Picture: Courtesy G. Lindberg.

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Briefly —

In a brief to the provincial government, the College of Dental Surgeons of British Columbia reiterated its support for continuing the use of the certificate of oral health when complete dentures are provided by dental mechanics. The Public Denturists Society is attempting to abolish the certificate, which attests that a patient's oral cavity has been inspected by a dentist or physician and is in fit condition for the insertion of full upper and lower dentures.

The College also reports that B.C.'s second dental hygiene school starts its first class next September at Douglas College in New Westminster. This is the first community college program in the province. The University of British Columbia has a class of 20 dental hygiene students every year.

CFDE's income rose to an all time high in 1981.

Canadian Fund for Dental Education Chairman Dr. James Guest announced that the \$239,000 income was 12 per cent more than in 1980. Gifts included over \$17,000 from dental organizations, \$83,144 from business and industry, \$68,136 from dentists, and \$2,326 from hygienists.

Dr. Guest said the generous contributions will help the trustees do a better job of promoting good dental health.

Dental school enrolments are declining in the United States and Great Britain. Canadian dental schools, however, are turning away students applying for first-year enrolment.

The ADA Council on Dental Education reports that first-year enrolment in dental schools has declined for the second consecutive year, from 6,030 students in 1980 to 5,855 in 1981. A larger decrease in 1982 is ex-

pected as a result of the U.S. Department of Health and Human Services decision to abolish enrolment requirements for institutions receiving capitation aid and construction grants.

In Great Britain, the Universities Central Council on Admissions also reports that applications from overseas students have continued to decline, by 40 per cent last year and a further 21 per cent in 1982. Although applications from British students next year are up by 10 per cent, university cuts mean there will be fewer openings.

St. George Street, Toronto has always carried a high dental profile — that is until recently.

About mid-December the brass signs identifying the Ontario Dental Association and the Academy of General Dentistry at 234 St. George Street and the sign identifying the Royal College of Dental Surgeons of Ontario at 230 St. George Street were swiped. We understand new ones are on order. However, there is a lot of speculation as to who the culprits are.

Four doctors from the University Hospital in Sherbrooke, Quebec recently received a \$397,758 Health and Welfare grant to study the influence of eating habits on young children's health.

Drs. Jitka Vobecky, Pierre-Paul Demers, Dennis Shapcott and Josef Vobecky are studying the effect of nutrition on the health and development of pre-school children with emphasis on the relationship between the diet and health of children aged three and six.

The grant came from the Department's National Health Research and Development Program.

Issues that affect the demand for dental services in private practice are the prime concern of dentists polled in an Academy of General Dentistry survey conducted in the United States in August, 1981.

According to AGD Impact, dentists are concerned about the increasing number of dental school graduates, low percentage of the public seeking regular dental care, third party intervention into dentist/patient relationship, and independent private practice of dental hygienists.

The membership also stated the Academy's top priorities should be to improve the quality of continuing education courses and to establish a positive image of the general dentist through public relations efforts.

The survey was distributed to 2,100 AGD members in the U.S. and the results were tabulated based upon a 41 per cent response.

AGD also surveyed its Canadian members, but the results are not yet available.

Dentists rank third for having high standards of honesty and ethics, according to a recent United States Gallup Poll conducted between July 24 and 27 among a wide range of professions and occupations. ADA News reports that clergymen came first, followed by pharmacists.

The American Dental Association's Special Dental Hygiene Committee has scheduled four meetings in 1982 to identify major job concerns facing dental hygienists, according to the ADA.

Dentists, dental hygienists and the general public are invited to provide input on such key dental hygiene issues as job security, employee benefits and career opportunities.

The committee will submit its final report later in the year as a step in determining potential solutions to the more pressing issues.

Dentists can monitor continuously their exposure to mercury, thanks to the ADA's new urine testing program. Trituration, expression, replacement of old restorations and unnoticed spills in the office add to the dentist's professional exposure to mercury, and can even lead to high levels of mercury vapour in the operatory, reports ADA News.

The urinalysis testing program, approved by the ADA Board of Trustees in October, 1981, is open to dentists and their staff. It is designed to educate the dentist and staff about the potential hazards of mercury exposure and to promote implementation of the ADA's recommendations on mercury hygiene practices.

Only four statewide paid advertising campaigns on dentistry are now underway in the United States, according to ADA News.

A recent survey of state dental societies found that campaigns are currently operating in California, Michigan, Minnesota and Hawaii. Two national dental organizations, the American Association of Oral and Maxillofacial Surgeons and the American Association of Orthodontists, are also engaged in institutional advertising programs.

Other states reported they are considering advertising campaigns in the near future.

Dr. Dennis Smith, Professor of Biomaterials in the Faculty of Dentistry, University of Toronto, is the recipient of the Mitch Nakayama Memorial Award of the Pierre Fauchard Academy of Japan. The award

is given for contributions of international significance to dentistry through improvements in the field of dental materials.

Dr. Smith, who has been invited to deliver the Skinner Memorial Lecture at Northwestern University Dental School, Chicago, on April 14, receives the award on July 17 in Japan.

Dental insurance is the fastest growing health-related employee benefit, according to a survey of 727 businesses conducted by a Philadelphia management consultant firm says the ADA News.

The survey found that the number of companies offering dental insurance increased 10 per cent over the previous year, from 59 per cent in 1980 to 69 per cent in 1981.

"Chatelaine's Guide to Good Teeth" that appeared in the magazine's November, 1981, issue is available to dentists and other interested persons. Reprints are being offered at \$1.00 for postage and handling or in bulk for 100 reprints to dentists at \$40. To order, contact the promotion department, Chatelaine, 481 University Avenue, Toronto, Ontario M5W 1A7 (416-596-5422).

The Canadian Hospital Association and the Canadian Public Health Association are sponsoring Canada Health Day on May 12, 1982. The theme is "Health and Safety: Everywhere for Everyone."

The prevalence of tooth decay among United States children has declined substantially over the past few years.

A survey conducted by the National Institute of Dental Research during the 1979-80 school year showed a 32 per cent decline in the incidence of tooth decay. Of the 38,000 children tested, 37 per cent were free of caries which represents an increase of nine per cent over the previous figure.

Suspected reasons for the decline in tooth decay included community water fluoridation, school-based fluoride tablet and mouthrinse programs, and the use of dentifrices containing fluoride.

Using the present study as a baseline, the NIDR staff plans to repeat the survey at intervals to detect changes in the prevalence of tooth decay in different geographic regions, to target special prevention programs toward high-risk groups, and to measure how effectively new preventive measures have reduced dental decay.

CDA Retirement Savings Plan

Unit values of the Canadian Dental Association's Retirement Savings Plan stood as follows on February 28, 1982.

<i>Common Stock Fund</i>	\$48.9979
<i>Fixed Income Fund</i>	\$26.6661
<i>Guaranteed Fund</i>	\$22.5200
<i>Balanced Fund</i>	\$11.4066

Total assets (market value) of the plan were \$30,363,510.

The previous month's figures, as of January 31, 1982, stood as follows:

<i>Common Stock Fund</i>	\$50.8173
<i>Fixed Income Fund</i>	\$26.3203
<i>Guaranteed Fund</i>	\$22.2836
<i>Balanced Fund</i>	\$11.9208

Total assets (market value) of the plan were \$30,412,151.

For further information write to: Canadian Dental Service Plans Inc., 2 St. Clair Ave. E., Toronto, Ont. M4T 2W1 or call the central information services of CDSPI At 1-800-268-3792 (961-7117 in Metro Toronto).



Cost-of-Living Protection



Extra Long Term Disability Insurance



Extra Office Overhead Insurance

**One more chance to improve your disability protection
... without medical evidence for most dentists**

More than 2,000 Canadian dentists applied when the Canadian Dentists' Insurance Program recently offered Canadian dentists three different opportunities to improve their disability protection. Here is another chance to add any, or all, of these offers, if you did not apply for them the first time.

Subject to the conditions below, they're available, without medical evidence, if you apply before May 15. Coverage is effective July 1, 1982.

Offer 2

Long Term Disability "Open Enrolment"

Whether you're in the plan or not, you can now buy \$500 of monthly indemnity, to be paid when you're sick or injured and unable to work. Maximum coverage (including the \$500 available under this offer) is \$4,000 monthly.

Offer 1

Cost-of-Living Option

After one year on claim, this option will increase your monthly benefit by 10% every year, for as long as you're on claim. The increase of 10% will be paid each year, up to the age of 65 if necessary, even if the actual rate of inflation drops below 10%. It applies both to benefits for total disability and benefits for residual disability. This option can apply to all of your Long Term Disability coverage, including the \$500 monthly indemnity available under Offer 2.

Offer 3

Office Overhead "Open Enrolment"

Whether you're in the plan or not, you can now buy \$500 of monthly Office Overhead Insurance. This insurance helps meet the cost of operating your practice — rent, utilities, employee salaries, and other fixed costs — when you are unable to practice because of sickness or accident. The maximum coverage now available is \$6,000 monthly.

Enrolment Conditions

You are eligible for any offer you did **not** purchase during the recent "open enrolment" from October to December, 1981. No medical evidence is needed, provided:

1. You are a member of CDA or a provincial association. Auxiliaries and full-time employees are also eligible.
2. You have not been refused disability insurance by any insurance company since Jan. 1, 1977.
3. You have not received disability benefits from any insurance company since Jan. 1, 1977.
4. Your application is post-marked no later than May 15, 1982.



**Canadian dentists'
insurance program**

Insurance Information
Call **1-800-268-3792** Toll free
(961-7117 in Metro Toronto)

APPLICATION FOR INSURANCE

PLEASE PRINT

Language Preference English ☐ French ☐

Name of Applicant (person to be insured)		Last Name		First Name		Middle Name	
Billing Address Suite #		Street and Number		City		Province	Postal Code
Social Insurance Number	Date of Birth Day Month Year	Business Phone Area Code	Sex Male ☐ Female ☐	Account No.		Payment Option: Quarterly ☐ Annual ☐	
OCCUPATION (check one)				Hygienist ☐ Employee ☐ Occupation _____ Graduate ☐ University _____ Year _____ Name of Employer _____ Student ☐ University _____ Certified Dental Assistant ☐			
MEMBER OF CDA: Yes ☐ No ☐				Dentists and students must be members of CDA or a provincial organization			
PROVINCIAL ORGANIZATION _____ (Name of organization)							

Offer 1 Cost-of-Living Option for Long Term Disability Insurance

☐ Check here if applying for this offer

If you have coverage under both waiting period options, and want Cost-of-Living to apply only to one of them, select one waiting period below:

- ☐ Waiting Period #1 (1st day of accident/8th day of sickness)
☐ Waiting Period #2 (31st day of accident or sickness)

Otherwise, Cost-of-Living will apply to all present coverage, including additional coverage under Offer #2.

Offer 2 Open Enrolment for Long Term Disability Insurance

☐ Check here if applying for \$500 monthly indemnity under this offer

- Payments to begin: ☐ 1st day of accident/8th day of sickness (Waiting Period #1)
☐ 31st day of accident or sickness. (Waiting period #2)

Offer 3 Open Enrolment for Office Overhead Insurance

☐ Check here if applying for \$500 monthly indemnity under this offer

- Payments to begin: ☐ 8th day accident or sickness
☐ 15th day accident or sickness
☐ 31st day accident or sickness

- Payment option: ☐ { 100% for three months
 65% for six months
 40% for three months
☐ 100% for 12 months

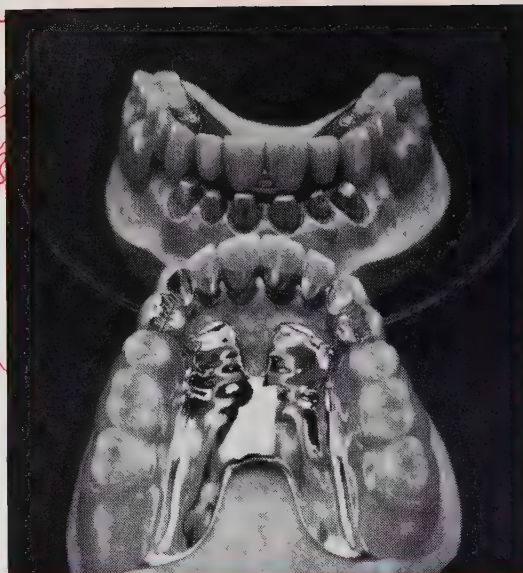
I hereby apply to The Imperial Life Assurance Company of Canada for the insurance indicated above. I declare that no application for disability insurance for me has been refused since January 1, 1977, and that I have not received benefits under any disability insurance policy* since that date. I declare that the information provided by me is true and complete in every respect and the insurance company may rely on the information in issuing policies to me.

Applicant's Signature _____ Date _____

- * ☐ Check here if you have been declined disability coverage or been on claim and wish to apply for any or all of these offers. An application kit and medical questionnaire will be sent by return mail so your circumstances can be reviewed.

Please mail this application to: Canadian Dental Service Plans Inc.
 2 St. Clair Avenue East
 Toronto, Ontario M4T 2W1

There's a Nobilium laboratory near you



A MARI USQUE AD MARE: FROM SEA TO SEA



Wherever you practice there is a Nobilium laboratory nearby . . . ready to process your partials with the "aristocrat of chromium alloys" . . . partials that satisfy every patient desire for dependable fit, functional service, oral comfort and lifelike aesthetics. Here is the list of skilled laboratories from British Columbia to Nova Scotia equipped with the latest Nobilium equipment and materials and dedicated to serve your every requirement. Entrust your prescriptions to them with confidence.

ONTARIO — TORONTO

Duracast Dental Laboratories

8 Taber Road, Rexdale

Hirsh Dental Laboratories Limited

495 Adelaide Street West

Modent Dental Laboratory

881 Eglinton Avenue West

Pearce Dental Lab

250 Lawrence Avenue West

The Posen & Furie

Dental Laboratories Limited

1366 Bathurst Street

Walter Wood Dental Laboratories

527A Bloor Street West

ONTARIO — HAMILTON

Allen & Rollaston

Dental Laboratory

Medical Art Bldg., Hamilton 20

ONTARIO — OSHAWA

Multi-County Dental Laboratories

172 King Street East

ONTARIO — THUNDER BAY

Imperius Dental Laboratory

55 North Court Street

BRITISH COLUMBIA — VANCOUVER

**Northwest Dental Laboratories
Limited**

1070 Homer Street

BRITISH COLUMBIA — VICTORIA

A & P Dental Laboratory Limited

401 - 1120 Yates Street

Turner Dental Laboratory

1207 Douglas Avenue, Suite 521

NOVA SCOTIA — AMHERST

Walter Horton

Dental Laboratories

31 La Planche Street

NOVA SCOTIA — HALIFAX

Gulf Casting Lab.

6061 Young Street

ALBERTA — CALGARY

**Aurum Crest Dental Laboratories
Limited**

115 - 17th Avenue S.W.

Frame Master Lab.

339 - 6th Avenue S.W.

MANITOBA — WINNIPEG

**Associated Crown & Bridge
Laboratory, Limited**

201 - 407 Graham Ave.

Manitoba Dental Labs.

603 Wall Street

Winnipeg Man. R3G 2T3

ALBERTA — EDMONTON

Northwest Dental Laboratory

10540 - 115th Street

Universal Dental Laboratories Ltd.

10066 Jasper Avenue

New-Johnston Dental Labs.

10202 - 102 Street

SASKATCHEWAN — SASKATOON

Aurum Crest Dental Laboratories Ltd.

336 - 6th Ave. North

QUEBEC — STE. THÉRÈSE

Lafond & Joly Dental Lab.

94 Blainville Ouest

QUEBEC — GRANBY

Julien-Ste. Jean Dental Lab.

356 Rue Principale

QUEBEC — MONTREAL

Amiga Dental Lab.

3400 Jean-Talon West

Dentarium Laboratories

6997 Victoria Avenue

Nobident Dental Laboratory

3726 Jean-Talon West

Roger Sauve Dental Laboratory

5545 Beaubien Est

QUEBEC — QUEBEC CITY

G. Garneau Dental Lab.

386 Dorchester, Sud

R. Laverdiere Dental Laboratory

613 Rue Cyrille Ouest

NEWFOUNDLAND — ST. JOHN'S

Fowler's Dental Laboratory

101 B Lemarchant Road, A1C 2H1

**Canadian Fund for Dental Education
Fonds Canadien Pour L'Enseignement Dentaire**

1981 Annual Report • Rapport Annuel



Chairman's Report



This is my last annual message as Chairman of the Board of Trustees of the Canadian Fund for Dental Education and I am writing it with feelings of gratitude, pride and satisfaction.

I am grateful that I have had the privilege of working with committed men and women from coast to coast who demonstrate, by serving on behalf of CFDE, their belief that service is the rent we pay for the room we occupy in life.

I am proud to have been a part of CFDE, both as a Trustee and as Board Chairman, and I am proud of the fact that contributions to the Fund since 1963 have made it possible to invest more than 1.5 million dollars to promote top quality dental health care. The Fund has provided money for dental research, student conferences and table clinic programs, teaching conferences, teacher training fellowships and a variety of projects that in some measure have benefited every dental school, student, practising dentist and dental patient in Canada.

And I am deeply satisfied in the knowledge that voluntary contributions to CFDE of \$240,000 in 1981 were greater than in any previous year and reflected an increase of 12% over 1980.

I confess to a continuing concern over the fact that the Fund receives financial support from a relatively small percentage of Canadian dentists. Nevertheless, I am continually encouraged by the fact that the size of gifts we receive has risen significantly. Personally I am convinced that through our support of CFDE we acknowledge the benefits we have received from dental education in the past.

In 1980 an Ad Hoc Granting Priorities Committee was formed to make recommendations for the Fund's granting priorities for the next five year period and on ways and means of reaching these objectives. The Chairman of this Committee was Dr. William G. McIntosh, the Committee report was received by the Trustees in October 1981, and the recommendations for priority funding categories were unanimously and enthusiastically accepted by them. The recommendations include research in the health planning field, education to advance dental health services to the public, student activities and specialist services for underserved areas. CFDE is profoundly grateful to Dr. McIntosh and the Committee members for their thoughtful work on behalf of the Fund.

On June 30, 1982, Mr. Murray McDonald will retire as Executive Director of CFDE. If it is true, as Ralph Waldo Emerson has written, that an institution is the lengthened shadow of one man, then surely CFDE is the lengthened shadow of Murray McDonald, a man who has served with distinction as Executive Director since 1967 and whose gracious and sensitive direction has caused the Fund to grow in stature and significance. To think of Murray's outstanding service to CFDE is to be reminded of these words of J. B. Conant, former President of Harvard University: "Each honest calling, each walk of life, has its own elite, its own aristocracy based on excellence of performance".

Miss Ingrid Kleysteuber has been with CFDE since 1967 as well, serving as Secretary to the Fund. I am delighted to report that Miss Kleysteuber will continue to work with the Fund and will be assuming added administrative responsibilities.

I express my gratitude to all who have supported me by working with me during my term of office and to all who have so generously supported the aims and objectives of CFDE.

Forty years ago, John D. Rockefeller said: "I believe that every right implies a responsibility; every opportunity, an obligation; every possession, a duty". If enough of us share that belief, the Canadian Fund for Dental Education will, in the years ahead, move forward to ever widening horizons.

A large, stylized handwritten signature in dark ink, which appears to read "James A. Guest".

James A. Guest, Chairman

Rapport du Président

Voici mon dernier message annuel à titre de président du conseil des fiduciaires du F.C.E.D. et je vous le transmets accompagné de sentiments de reconnaissance, de fierté et de satisfaction.

Je suis reconnaissant d'avoir eu le privilège de collaborer avec des hommes et des femmes dévoués d'un bout à l'autre du pays qui prouvent, en travaillant pour le compte du Fonds, qu'ils estiment que leur service représente le loyer qu'ils payent pour la place qu'ils occupent au sein de la société.

Je suis fier d'avoir fait partie du F.C.E.D. à titre de fiduciaire et de président du conseil et je suis fier de savoir que les dons faits au Fonds depuis 1963 ont rendu possible l'investissement de plus de \$1,5 million destinés à promouvoir des soins dentaires de toute première qualité. Le Fonds a offert de l'argent pour la recherche dentaire, des congrès d'étudiants, des programmes de clinique sur table, des congrès d'enseignement, des bourses de formation pour les enseignants, ainsi qu'une variété de projets dont ont tiré profit toutes les écoles de médecine dentaire, les étudiants, les dentistes ainsi que les patients canadiens.

Et je m'estime satisfait par le fait que les dons bénévoles au F.C.E.D. en 1981 s'élevaient à \$240,000, battant tous les records préalables et reflétant une augmentation de 12% en regard de l'an dernier.

J'avoue que cela m'inquiète que le Fonds ne reçoivent son appui financier que d'un pourcentage relativement faible des dentistes canadiens. Mais je continue à être encouragé par le fait que l'envergure des dons ne cesse d'augmenter. Je suis personnellement persuadé qu'au moyen du soutien que nous apportons au F.C.E.D., nous reconnaissons les bénéfices que nous a procuré dans le passé, l'enseignement dentaire.

En 1980, nous avons constitué un comité ad hoc sur les priorités pour les cinq prochaines années. Ce dernier, présidé par le Dr. William G. McIntosh, a soumis en octobre 1981, un rapport aux fiduciaires et ils ont accepté avec unanimité et enthousiasme ses recommandations portant sur les priorités. Ces recommandations comprennent la recherche dans le domaine de la planification de la santé, l'enseignement en vue d'améliorer les services dentaires, les activités des étudiants et les services

spécialisés pour les zones mal desservies. Le F.C.E.D. remercie vivement le Dr. McIntosh et les membres du comité pour les efforts judicieux qu'ils ont fait à cet égard.

Le 30 juin 1982, M. Murray McDonald se retirera du poste de directeur exécutif. Ralph Waldo Emerson déclare que toute institution ne représente que le prolongement de l'ombre d'un homme et le F.C.E.D. doit alors sûrement être le prolongement de l'ombre de Murray McDonald, un homme qui a accompli sa mission à titre de directeur exécutif depuis 1967 et dont la compétence et l'humanité ont permis au Fonds de se développer et d'acquiescer de la stature. Lorsque l'on considère l'extraordinaire contribution faite par M. McDonald au F.C.E.D., on ne peut s'empêcher de penser aux mots de J. B. Conant, ancien président de l'Université Harvard: "Toutes les honnêtes vocations, toutes les professions ont, à leur actif, leur propre aristocratie qui repose sur l'excellence de la réalisation".

Mlle Ingrid Kleysteuber oeuvre également au sein du F.C.E.D. depuis 1967, au poste de secrétaire. Je suis heureux de dire que Mlle Kleysteuber continuera à travailler parmi nous et assumera en fait des responsabilités administratives supplémentaires.

Je remercie tous ceux qui m'ont secondé au cours de mon mandat, ainsi que tous ceux qui ont si généreusement appuyé les objectifs du F.C.E.D.

Il y a quarante ans, John D. Rockefeller déclarait: "J'estime que tous les droits entraînent des responsabilités; toutes les occasions favorables, des obligations; toutes les possessions, des devoirs". Si un nombre suffisant d'entre nous partagent cette opinion, le F.C.E.D. continuera à progresser, au cours des années, vers des horizons toujours plus larges.



James A. Guest, D.D.S.

Executive Director's Message Message du Directeur Exécutif



It is with great pride that I reflect back over the past 15 years as Executive Director of CFDE.

I am especially pleased to note that the growth of the organization has resulted in the investment of 1.5 million dollars in programs that have already benefited dentistry and will continue to do so in the future.

Since the Fund started, 72 cents of every dollar received has been invested in dental education and research, endowment funds or reserves. Thirteen cents went to fund raising costs and fifteen cents covered general management and program services.

As can readily be seen on the facing page, 1981 income from every source was more than in the previous year.

This tangible expression of confidence from our many supporters is most encouraging to all of us connected with the Fund.

Good news! Yes, but even better news is that gifts from dentists, hygienists and companies as well as investment income all soared to record highs.

Obviously the key to the Fund's success is the contributions received from dentists and their auxiliaries because this is the yardstick used by companies and foundations in determining the measure of their support.

This year for the first time a new category called "Patrons" (individuals giving

\$200 or more) was established and it is most encouraging to note that 55 dentists are so designated on the following pages. Also there are 246 dentists listed as "Honour Members" plus hundreds more who contributed smaller amounts all for the benefit of their profession.

Away back in 1962 dentally related companies demonstrated their interest in dental education and research by putting up a major share of the cash needed to launch CFDE. They have generously supported Fund programs every year since then and in 1981 many increased their support. As a result a new high was achieved.

Ever mindful of having a balanced budget, the Trustees approved grants totalling \$116,000 in 1981. The decrease of \$5,000 was largely due to several fellowship recipients not accepting their awards for various reasons, such as obtaining an MRC grant of a larger amount.

This decrease plus lower than budget operating expenses and increased income enabled the Trustees to approve grants in late 1981 amounting to \$19,000 for payment in 1982.

A lot of hard work lies ahead, but I am confident that in the coming years we will continue to progress toward the important goals we have set for ourselves.

Although I will retire in June 1982, I shall always remain one of the Fund's most enthusiastic supporters. It has been a privilege and an honour to serve such an important health profession.

A handwritten signature in cursive script that reads "Murray McDonald".

Murray McDonald

C'est avec beaucoup de fierté que je contemple les quinze années que j'ai passées au poste de directeur exécutif du Fonds canadien pour l'enseignement dentaire.

Je suis particulièrement heureux de noter que les revenus bruts du Fonds ont eu pour résultat le placement de \$1,5 million dans des programmes dont bénéficie la médecine dentaire aujourd'hui, et dont elle tirera aussi profit à l'avenir.

Depuis la constitution du F.C.E.D., 72 cents sur chaque dollar recueilli ont été

investis en recherche et en enseignement dentaire, en fonds de dotation ou en réserves; 13 cents en activités de recrutement; et 15 cents en gestion et services.

Ainsi que l'on peut facilement constater à la page en face, les revenus de toutes sources en 1981 ont dépassé ceux de l'année précédente. Cette manifestation concrète de la confiance que nous témoignent les nombreux donateurs est très encourageante pour tous ceux qui sont associés au Fonds.

Bonne nouvelle! Mais le fait que les donations en provenance des dentistes, des hygiénistes et des compagnies, ainsi que les revenus provenant d'investissements ont battu tous les records passés, constitue même encore une meilleure nouvelle!

De toute évidence, la clé du succès du Fonds provient des contributions faites par les dentistes et leurs auxiliaires, car celles-ci représentent la norme au prorata de laquelle diverses entreprises et fondations déterminent l'envergure de leur appui.

Nous avons établi, pour la première fois cette année, la nouvelle catégorie de 'bienfaiteurs' (particuliers dont la donation s'élève à \$200 ou plus) et il est très encourageant de noter que 55 dentistes font partie. 246 dentistes font partie de la catégorie des 'membres d'honneur' et de centaines d'autres ont contribué des sommes moindres.

Il y a un nombre d'années, en 1962, plusieurs compagnies qui oeuvraient dans des domaines dentaires ont prouvé l'importance qu'elles portaient à l'enseignement et à la recherche dentaire en contribuant la plus grande partie des fonds nécessaires à la constitution du F.C.E.D. Elles ont généreusement appuyé tous les ans depuis, les programmes organisés par le Fonds et, en 1981, certaines d'entre elles ont augmenté leur soutien. Un nouveau record a été battu en conséquence.

Équilibrant toujours avec soin le budget, les fiduciaires ont approuvé en 1981, des subventions s'élevant à \$116.000. La diminution de \$5.000 est principalement due au fait que plusieurs bénéficiaires de bourses n'ont pas accepté la leur pour une raison ou l'autre (par exemple, l'obtention d'une bourse plus élevée du MRC).

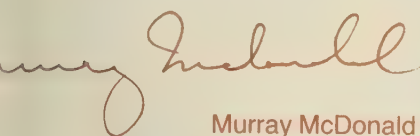
Cette diminution, à laquelle viennent s'ajouter des frais d'exploitation inférieurs aux sommes prévues, ainsi que des

Financial Highlights • Faits Financiers Marquants

s supérieurs, ont permis aux
res d'approuver à la fin de 1981 des
tions s'élevant à \$19.000, payables
2.

ous avons, devant nous, beaucoup
ail, mais je suis persuadé que nous
erons à progresser ces prochaines
s en direction des importants objectifs
us nous sommes fixés.

Bien que j'aie l'intention de prendre
raite en juin 1982, je resterai toujours
s partisans les plus enthousiastes du
Servir un secteur aussi capital de la
ine a été pour moi un privilège et un
ur.



Murray McDonald

Income • Revenus	1981	1980
Business and Industry Commerce et industrie	\$ 83,214	\$ 79,519
Dental Profession Profession dentaire	\$ 72,916	\$ 68,292
Investment and Sundry Income Revenus de placements et de sources diverses	\$ 59,242	\$ 51,013
Dental Organizations Associations dentaires	\$ 23,606	\$ 14,380
Total	\$238,978	\$213,204

Grants • Subventions	1981	1980
Teacher Training Fellowships (Dentists and Dental Hygienists) Bourses de formation en enseignement (Dentistes et Hygiénistes dentaires)	\$ 51,142	\$ 57,423
Grants to Dental Schools Subventions aux écoles dentaires	\$ 15,000	\$ 15,000
Student Table Clinics and Conference Conférence et cliniques sur table des étudiants	\$ 14,310	\$ 11,701
Lorne E. MacLachlan Endowment – Teacher Training Awards Dotation Lorne E. MacLachlan – Bourses pour la formation d'enseignants	\$ 9,625	\$ 9,625
Biennial Dental Research Conference Conférence biennale de la recherche dentaire	–	\$ 8,500
CDA Interview Validation Study Etude sur la valeur des entrevues de l'ADC	–	\$ 6,000
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Research Project - University of Toronto Projet de recherche - Université de Toronto	\$ 3,827	\$ 3,873
Sundry Awards Octrois divers	\$ 6,513	\$ 4,168
Total	\$110,917	\$126,290

Our records have been audited by Thorne Riddell. A copy of their report is available on request.

La vérification de notre comptabilité a été effectuée par Thorne Riddell. Une copie de leur compte-rendu financier sera envoyée sur demande.

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4. Bird, P.D. The development of dental radiology: the realisation of a scientific dream. British Dental Journal, v.151, no.1, July 7, 1981, pp.28-30.
5. Brodbelt, R.H., O'Brien, W.J., Fan, P.L., Frazer-Dib, J.G. and Yu, R. Translucency of human dental enamel. Journal of Dental Research, v.60, no.10, Oct. 1981, pp.1749-1753.

Abstract: "Translucency of human dental enamel was determined by total transmittance of wavelengths from 400 to 700 NM. The transmission coefficient at 525 NM was 0.481 MM-1. Total transmission of light through human dental enamel increased with increasing wavelength. Human tooth enamel is more translucent at higher wavelengths. The translucency of wet human enamel and enamel after dehydration was also measured by total transmittance. The transmission coefficient at 525 NM decreased from 0.482 to 0.313 MM-1 after dehydration and was reversed on rehydration. The decrease in translucency occurred as a result of the replacement of water around the enamel prisms by air during dehydration."

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6. Collett, W.K. Intraoral radiographic errors in films submitted for orthodontic consultation. Oral Surgery, Oral Medicine, Oral Pathology, v.49, no.4, Apr. 1980, pp.370-372.

Abstract: "Radiographic surveys submitted by referring dentists to an orthodontic office for consultation are evaluated for their diagnostic value, and the observed errors are categorized as to technique, processing, and film-aging problems. The distribution of technique errors by anatomic location is identified. These results are compared with data from similar studies involving both dental and hygiene students."

7. Farman, A.G. and Shawkat, A.H. Survey of radiographic requirements and techniques. Journal of Dental Education, v.45, no.9, Sep. 1981, pp.581-584.
8. Forest, D., Dechamps, M. et Normandeau, C. Dosimétrie comparative des appareils à rayons X dentaires conventionnels et à potentiel constant au cours d'un examen inter proximal. Journal dentaire du Québec, v.17, août-sept. 1980, p.49-56.

9. Gratt, B.M., Sickles, E.A. and Armitage, G.C. Use of dental xeroradiographs in periodontics: comparison with conventional radiographs. *Journal of Periodontology*, v.51, no. 1, Jan. 1980, pp. 1-4.

Abstract: "An experimental intraoral dental xeroradiographic system was evaluated for its ability to image structures important in periodontal radiographic interpretation. On consenting dental patients, similar x-ray projections were made on (1) conventional film radiography and (2) experimental dental xeroradiographs. The resultant images were compared visually. In all categories examined the information provided by xeroradiography was either equal to or greater than that provided by conventional film radiographs. Intraoral dental xeroradiography appears to be a highly accurate, low-radiation, rapid and convenient alternative to conventional intraoral radiography."

10. Jensen, T.W., Goldberg, A.J. and Randall, G.J. Image resolution in dental and maxillofacial radiography with the conventional and "free focus" imaging concepts. *Oral Surgery, Oral Medicine, Oral Pathology*, v.51, no.6, June 1981, pp.653-661.

Abstract: "An investigation of the resolution capability of conventional and 'free focus' dental radiography on non screen film was completed. The over-all imaging performance of conventional and 'free focus' radiography exposed with three types of dental x-ray machines was comparable. . . Differences in path length of the x-ray beam during clinical applications of conventional and 'free focus' radiography indicated a higher potential for image noise

and degradation in conventional films. A potential for segmental variation in image resolution in surveys of the dentition was seen only in the conventional techniques. These characteristics must be balanced against a tendency to variable segmental magnification in free focus radiography. Indications, however, are that applications of 'free focus' radiography may be able to improve the early diagnosis of dental disease. Periapical type surveys of the dentition produced by 'free focus' radiography may require only two exposures instead of the 14 to 20 required in conventional periapical surveys and may contain characteristics of periapical as well as bitewing films. 'Free focus' radiography represents an attractive alternative that may be able to accomplish substantial time savings in the practice of dental radiography."

11. Jeromin, L.S., Geddes, G.F., White, S.C. and Gratt, B.M. Xeroradiography for intraoral dental radiology: a process description. *Oral Surgery, Oral Medicine, Oral Pathology*, v.49, no.2, Feb. 1980, pp.178-183.

Abstract: "A novel x-ray imaging system for intraoral dental radiography is described. The imaging process is based on xeroradiographic principles. The surface of a small selenium photoreceptor is electrically charged. After insertion into a light-tight cassette, the photoreceptor is placed intraorally, and x-ray exposed like film. The resultant electrostatic charge image is developed in a processor using liquid toner. The toner image is then transferred from the photoreceptor and fixed to a white plastic substrate for viewing. After cleaning, the photoreceptor is available for reuse.

In contrast to film images, xeroradiographic images are exposed and processed sequentially. Processing time is approximately 20 seconds. Two image characteristics — edge enhancement and deletion — are primarily responsible for many advantageous qualities of xeroradiographic images over film images. An experimental processor was tested successfully at two dental schools."

12. Langland, O.E., Langlais, R.P., Morris, C.R. and Preece, J.W. Panoramic radiographic survey of dentists participating in ADA health screening programs: 1976, 1977, and 1978. *Journal of the American Dental Association*, v.101, no.2, Aug. 1980, pp.279-282.

Abstract: "Results of the panoramic examination of dentists participating in the health evaluation program of the ADA annual sessions held at Las Vegas (1976), Miami Beach (1977), and Anaheim (1978) were reported and compared as accurately as possible with the results of the panoramic examinations of dentists taking part in the health evaluation programs of the ADA annual sessions in 1964, 1966, and 1968. The panoramic radiograph continues to serve as a diagnostic aid in dental health evaluation programs. Only general impressions may be drawn from surveys of this nature for various reasons: the inability to follow up each case with a clinical examination; the lack of correlation of findings between examiners; and the use of different criteria each year. Generally, dentists examined in the health evaluation programs in 1976, 1977, and 1978 were in good dental health."

13. National Center for Health Care Technology. Dental radiology: a

summary of recommendations from the Technology Assessment Forum. Journal of the American Dental Association, v.103, no.3, Sep. 1981, pp.423-425.

Abstract: "It was the consensus of the Forum that the activities of all the individuals and groups involved in dental radiology — the dentist, dental societies, peer review groups, state boards, dental schools, third party carriers government agencies — should be directed toward assuring the quality of the entire radiological process. In particular, methods should be developed for coordinating the activities of these groups in the interests of providing patients with the best care possible. The National Center for Health Care Technology Dental Radiology Planning Committee concluded that the purpose of the conference was well founded and that the recommendation produced from this undertaking will be of definite benefit in resolving issues outlined in the conference objectives."

14. Nowak, A.J., Creedon, R.L., Musselman, R.J. and Troutman, K.C. Summary of the Conference on Radiation Exposure in Pediatric Dentistry. Journal of the American Dental Association, v.103, no.3, Sep. 1981, pp.426-428.
15. Seldin, E.B., Bauman, R.A., Wieder, J.F. and Stigger, E. A computer-assisted system for reporting of dental radiographs. Oral Surgery, Oral Medicine, Oral Pathology, v.51, no.1, Jan. 1981, pp.108-111.

Abstract: "A computer reporting

system in radiology at the Massachusetts General Hospital (MGH) uses the direct transcription of dictated reports into the computer with the option of standard reports. This article describes a system in regular use at MGH for reporting dental radiographs in which both the clinical history and the radiographic findings are assembled from canned subunits of standard text. The system covers 80 to 90 percent of all dental radiographs and results in a clear report requiring far less production time than previously."

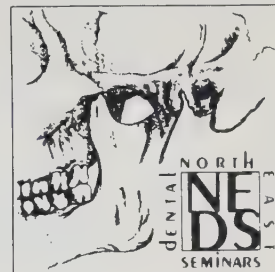
16. Silha, R.E. The new Kodak Ektaspeed dental x-ray film. Dental Radiography and Photography, v.54, no.2, 1981, pp.32-35.
17. Tebrock, O.C. Mounting dental radiographs for projection or chairside viewing. Journal of Prosthetic Dentistry, v.45, no.4, Apr. 1981, p.456.
18. Van Luijk, J.A. NMR: dental imaging without x-rays? Oral Surgery, Oral Medicine, Oral Pathology, v.52, no.3, Sep. 1981, pp.321-324.

Abstract: "Recently, advances in a new method of medical imaging have been reported by various authors. The method is based on the physical phenomenon of nuclear magnetic resonance (NMR) and is a well-established technique used in chemistry and physics. Radio waves are transmitted and detected in the presence of magnetic fields; the method is noninvasive and does not use ionizing radiation. The potential use of NMR in dentistry and basic concepts of NMR imaging are discussed.

For further information contact the librarian at the CDA Library, 1815 Alta Vista Drive, Ottawa, Ontario K1G 3Y6 (613-523-1770).

On peut obtenir de plus amples renseignements auprès de la bibliothèque, Bibliothèque de l'ADC, 1815, promenade Alta Vista, Ottawa (Ontario), K1G 3Y6 (613-523-1770).

Northeast Dental Seminars



presents

**Harold Gelb, DMD,
Sally I. Gelb, BA,
Samuel Bursuk, ND**

The Diagnosis and Treatment of TMJ Dysfunction, Myofunctional Therapy and Bionutritional Analysis as Applied to Dental Practice

**Toronto: April 24 and 25
Halifax: May 7 and 8*
San Francisco: May 15 and 16**

*Bursuk will not be present.

A world renowned lecturer and temporomandibular joint specialist, Dr. Gelb will present a holistic approach to TMJ dysfunction with the help of his myofunctional therapist, Mrs. Gelb, and nutritional consultant, Dr. Bursuk. In addition to benefiting from the research and clinical experience presented, dental professionals will have the opportunity to gain "hands-on" experience and expertise. Mrs. Gelb will discuss the diagnosis and treatment of patients with traumatic swallowing problems; Dr. Bursuk will show how the use of such physiological analyses as the SMA 24 blood chemistry profile can help dental professionals better manage such conditions as periodontal disease, tooth sensitivity, herpes simplex and bruxism.

Cost: \$350 (auxiliaries half-price)

Participation is limited so please call 603/329-6117 immediately for more information.

Convention

CDA/ODA Convention, Toronto, May 9-12 Presents Nine Mini-clinics

Nine mini-clinics have been scheduled for Monday, May 10 and Tuesday, May 12 at the joint CDA/ODA Convention being held at The Sheraton Centre, Toronto.

At 2:30 pm on Monday, Dr. J.M. Hawkins of Toronto will discuss "Local anesthesia in the 1980s: current standards of care." Dr. D.B. McAdam, also of Toronto, will speak about the construction of amalgam restoration using a custom matrix, and Ottawa's Dr. T.D.G. Lyons

speaks about "Oral amoebiasis: diagnosis and management of oral parasites in periodontal patients."

Drs. L.M. Levin and A.J. Ferro of Hamilton team up to discuss the three aspects of general practice, including building a winning team, at 3:15 pm. At the same time, Dr. I. Hrabowsky, St. Catharines, will be talking about computer applications in dentistry while Dr. S.S. Schipper from Toronto tells dentists how to improve communications in and out of the office.

The 4 pm mini-clinics that day include: "How to be successful in the 80s" by Dr. D. Cowan, Toronto; "Endodontic pitfalls and why didn't Mother warn me there would be days like today" by Dr. B.H. Korzen; and acupuncture by Dr. H.J. Adirim.

Many of these mini-clinics with the exception of Dr. Adirim's lecture on acupuncture will be repeated Tuesday, May 11. In his place, Dr. W.H. Tester of St. Catharines will discuss photography for the dentist at 3:15 pm.

CDHA and ODHA Convention

The Canadian and Ontario Dental Hygienists Associations, and the Ontario Dental Nurses and Assistants Association are holding their annual conventions at The Sheraton Centre, Toronto.

The hygienists are meeting at the same time in the Holiday Inn Downtown, following the CDHA board of directors annual meeting May 7, 8 and 9. On opening day of the convention, an educator's workshop will be held from 9 am to 5 pm. Also scheduled that day are the Family Fun Run at 10 am, transaction meeting at 2:15 pm, registration from 4 to 8 pm, and the gala fashion show and get-acquainted night from 7 to 9:30 pm.

The convention program itself kicks off Monday, May 10, with registration and coffee and muffins in the morning. Dr. L. Gilka gives a talk on "The relationship of food additives and allergies to physical and emotional health" between 9:15 and 11:45 am, followed at noon by either a luncheon or lunch tour of Toronto aboard a vintage trolley car.

Ms. Dale Scanlan discusses "Dentistry for the handicapped" and Ms.

Jenny Thomas speaks on "A little bit extra" from 2 to 3 pm.

From 3 to 4 pm, Ms. Pat Johnson discusses "Dental hygiene practice settings — is an alternative in your future?" while Ms. Barb Long's topic is about "The dental therapist — hygienist in an academic environment."

At 4:15 pm the ODHA general membership meeting starts, followed by cocktails with music by Peter Appleyard at 7 pm and a dinner-theatre performance by Second City Revue at 8 pm.

A lecture on holistic medicine by Dr. M. Borins from 9:15 am to 12 noon is scheduled for Tuesday, May 11. Dr. George Benjamin, who will talk about "15,000 years under the sea," is the luncheon speaker. From 3 to 6 pm, visitors will have an opportunity to view the table clinics and commercial exhibits prior to attending the CDHA and ODHA presidents' reception from 6:30 to 9 pm. Dancing to the Nova Sounds follows.

Wednesday, May 12, begins with the wind-up breakfast at the CN Tower revolving restaurant at 8:15 am. Then, from 10 am to 12 noon and

1:30 to 3:30 pm, Ms. Arlene Levin discusses "Burnout in dentistry." A buffet luncheon will be held at 12:15 pm.

Specialty Groups Meet

Many specialty sections are aligning their annual meetings to the location and time period of the national convention.

The Canadian Academy of Prosthodontics meets May 7 and 8 at The Park Plaza, the Ontario Society of Periodontists meets the same days at The Sheraton Centre, while both the Canadian Society of Public Health Dentists and Canadian Society of Orthodontists meet at The Sheraton Centre May 8 and 9.

Also on May 9 at The Sheraton Centre, meetings have been scheduled for the Canadian Academy of Paedodontics and the Canadian Academy of Oral Radiology. The Ontario Society of Orthodontists meets May 10 at 7:30 pm at The Sheraton Centre.



The Sheraton Centre

CDA/ODA Luncheons

Two luncheons will be held during the convention. The CDA luncheon takes place Monday, May 10 and special presentations will be made. The new Ontario President Dr. D.B. Smith will be installed at the ODA luncheon Tuesday, May 11.

ODN & AA Meeting

The Ontario Dental Nurses and Assistants Association's 51st annual convention begins at the Holiday Inn Downtown Saturday, May 8, with a meeting of the board of directors and accreditation division. The opening ceremonies on Monday, May 10, will be followed by discussion on holistic medicine by Dr. Edward Leyton from 9:30 to 10:45 am. Dr. Leyton returns at 11 am to discuss "Wailing and gnashing of teeth," which is followed by a luncheon at 12:15 pm. At 2 pm, Dr. Mary McEwan speaks about "The evolution of the professional team." On Tuesday, May 11, Dr. David Kenny is slated to speak at 9:15 am about nursing bottle syndrome, followed by a discussion on "Life, death and the new biology" by Susan Evans at 11 am.

Cross Canada 10 km Classic Family Funn Runn

Date: Sunday, May 9, 1982 — 10 a.m. SHARP
Place: Toronto Island
Entry Fee: BEFORE April 15 — \$ 8.00 per person — \$16.00 per family
 AFTER April 15 — \$10.00 per person — \$20.00 per family
 T-shirt given to each participant

Times provided during course of the run. Certificates to all finishers.
 Awards will be presented at the Sunday Evening Buffet to winners in the following categories:

- Men's Open — 1st, 2nd, 3rd place finishers
- Ladies' Open — 1st, 2nd, 3rd place finishers
- Age groups 40 — 49) 50 — 59) 60+) 1st finishers, male and female

Two new permanent trophies have been donated and will honour the open winners of the Men's and Ladies' division.
 Open to Dentists, Dental Auxiliaries, Dental Students, Convention Exhibitors and their immediate families only.

For additional entry forms and/or further details write to:
 CDA/ODA Convention Run
 234 St. George Street
 Toronto, Ontario
 M5R 2P1

Entry Form

Mail along with cheque
 (made payable to CDA/ODA Convention Run) to:
 CDA/ODA Convention Run,
 234 St. George Street,
 Toronto, Ontario
 M5R 2P1

Further details will be supplied
 In consideration of your accepting this entry. I hereby for myself, my heirs, executors and administrators, waive and release the Canadian Dental Association, The Ontario Dental Association and Metropolitan or City Parks organization, their agents, representatives, successors and assigns, from any and all claims and demands whatsoever by reason of any act, matter, cause or thing whatsoever relating to and/or arising out of my participation in the CDA/ODA Convention Run.
 I certify that I am physically fit to compete in this event.

Signature _____ Date _____
 (Parent's or guardian's signature required if under 18 years)

Print name of entrant _____

Age on race day _____ Sex _____

Street address _____ Apt. _____

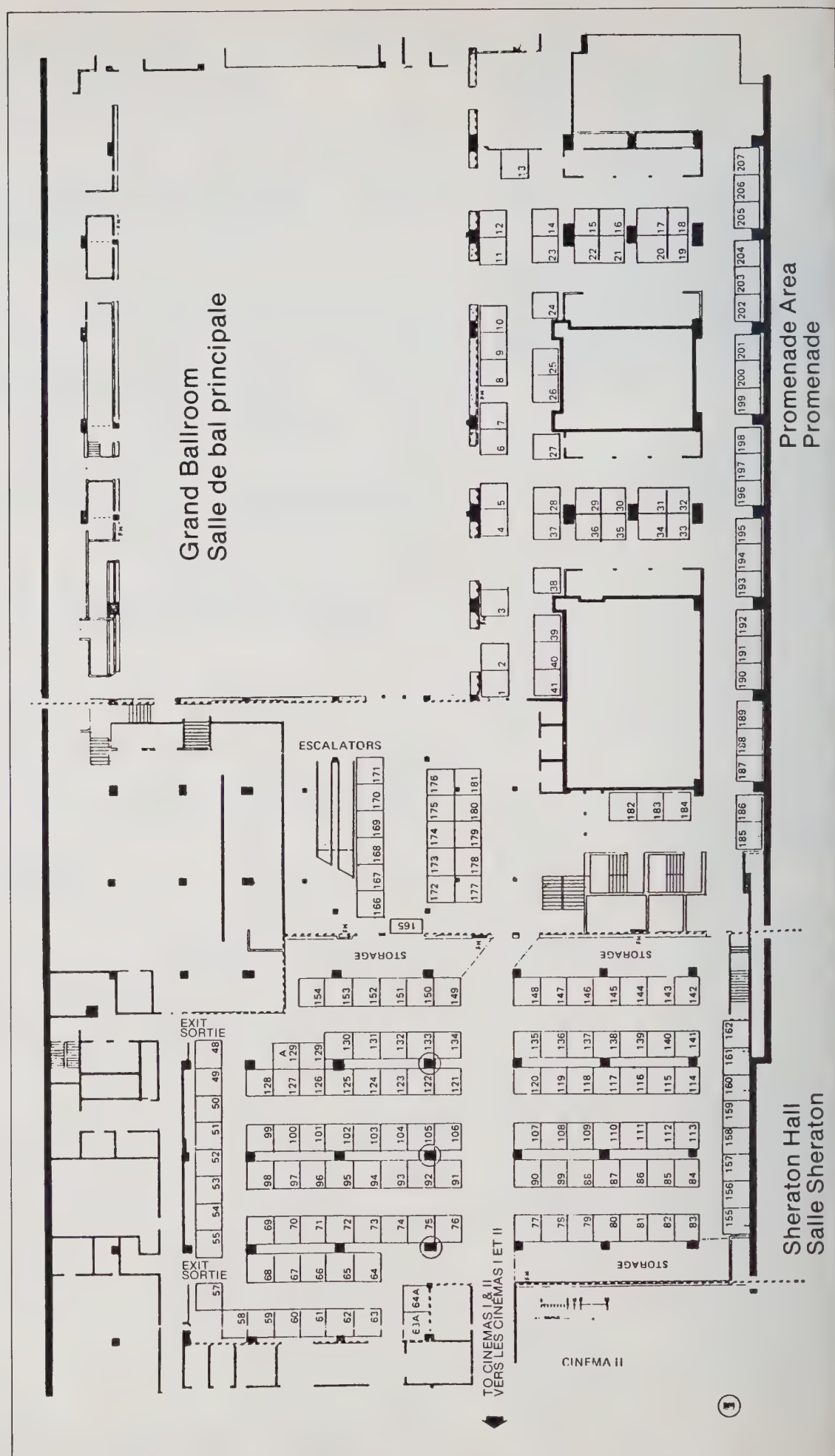
City _____ Province _____ Postal Code _____

Telephone _____ Shirt Size (S) ☐ (M) ☐ (L) ☐

Category: ☐ Dentist ☐ Dental Hygienist ☐ Dental Assistant ☐ Dental Technician,
☐ Exhibitor ☐ Wife ☐ Husband ☐ Child

The Sheraton Centre Lower Concourse Exhibitors Floor

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182	Rol Management Consultants Inc.	Mr. Roy Brown President Rol Management Consultants Inc. 1272 Tecumseh Park Drive Mississauga, Ontario L5H 2W4	86	Sweet & Kerbel Laboratories Ltd.	Mr. S. Sweet President Sweet & Kerbel Laboratories Ltd. 2600 Eglinton Avenue West Toronto, Ontario M6M 1T5	112, 113	Unident Ltd.	Mr. George Havlicek President Unident Ltd. 150 Connie Crescent Units 2-3 Concord, Ontario L4K 1C5	190	World Dental Laboratories	Mr. A. Da Luca World Dental Laboratories 25 Dundas Street West Mississauga, Ontario L5B 1H2
196	Sabra-Dent Ltd.	Mr. G. Gary Down President Sabra-Dent Ltd. 856 Beaufort Avenue Ushaw, Ontario L1G 1G3	121, 122, 133, 134	Sybron Dental Products Canada	Mr. H.M. King Sybron Dental Products Canada 6845 Rexwood Rd., Unit 2 Mississauga, Ontario L4V 1R2	171	Uniform World	Mr. E. Mathie President Uniform World Box 296 Renfrew, Ontario K7V 4A4	53, 54	Wright Dental Canada Ltd.	Mrs. G. Fisher Secretary-Treasurer Wright Dental Canada Ltd. 257 Centre Street East Richmond Hill, Ontario L4C 1A7
172	W.B. Saunders Company Canada Ltd.	Mr. W.S. Bailey President & General Manager W.B. Saunders Company Canada Ltd. 1 Goldthorne Avenue Toronto, Ontario M6Z 5T9	15, 16, 21, 22	Takara Co. Canada Ltd.	Mr. T.H. Traves Assistant General Manager Takara Co. Canada Ltd. 2076 South Sheridan Way Mississauga, Ontario L5J 2W4	204	VMR Business Systems Ltd.	Ms. Beverley Brown Marketing Service VMR Business Systems Ltd. 341 Lasmill Road Don Mills, Ontario M3B 2V1			
135, 136, 137	Shaw Laboratories Ltd.	Mrs. Donna W. Davis Sales Manager Shaw Laboratories Ltd. 104 Bond Street Toronto, Ontario M5B 1X9	141	George Taub Products & Fusion Co. Inc.	Mr. L.D. Taub Treasurer/Sales George Taub Products & Fusion Co. Inc. 277 New York Avenue Jersey City, N.J. 07307	48	Van R. Dental Products Inc.	Mr. Lao J. Gunn Vice-President Sales Van R. Dental Products Inc. 8894 Regent Street Los Angeles, California 90034			
			191	Tek Hughes Products Ltd.	Mr. W. Mahony Product Manager Tek Hughes Products Ltd. 974 Lakeshore Rd. East Mississauga, Ontario L5E 1E4	58, 59	Video Dentistry	Dr. Brian Price President Video Dentistry 1500 Don Mills Road Ste 501 Don Mills, Ontario M3B 3K4			

Editor's Note: Booth numbers subject to last minute changes.

Convention

REGISTRATION FORM CDA/ODA Convention

The Sheraton Centre, Toronto, May 9-12, 1982

Please complete and mail with your cheque to:

CDA/ODA Convention

234 St. George Street, Toronto, Ontario, M5R 2P1

(Make cheque payable to CDA/ODA Convention)

Dentists

CDA and ODA Members or Members of a recognized Dental Society in another Province or State

\$85.00 \$ _____

Non Members \$135.00 \$ _____

Fee includes admission to all Scientific Sessions, Commercial Exhibits, Monday Breakfast and three Luncheons.

Sunday Evening, May 9

Buffet dinner and dancing

Tickets \$15.00 per person \$ _____

Monday Evening, May 10

Cocktails with Peter Appleyard

Dinner-theatre with Second City Revue

Tickets \$20.00 per person \$ _____

Tuesday Evening, May 11

Fun Nite — Informal Party — dancing

Tickets \$5.00 per person \$ _____

Ladies — Monday, May 10

Luncheon and Fur Fashions at the top of the CN Tower

Tickets \$15.00 per person \$ _____

Wednesday, May 12

Farewell Champagne Breakfast

Tickets \$5.00 per person (Ladies only) .. \$ _____

Total enclosed \$ _____

Dr. _____
Given or common name Surname

Spouse's name _____

Address _____

To avoid loss, no tickets will be mailed. Advance registrations can be picked up at the Advance Registration Desk, Lower Mezzanine, Sheraton Centre during the meeting commencing Sunday, May 9 at 2 p.m.

FORMULAIRE D'INSCRIPTION

Congrès de l'ADC et de l'ADO

Centre Sheraton de Toronto, du 9 au 12 mai 1982

Veuillez remplir ce formulaire et le retourner avec votre chèque à l'adresse suivante:

Congrès de l'ADC et de l'ADO

234 St. George Street, Toronto, Ontario, M5R 2P1

(Établissez le chèque au nom du Congrès de l'ADC et de l'ADO.)

Dentistes

Les membres de l'ADC et de l'ADO ou les membres d'une société reconnue d'une autre province ou d'un État

85\$ \$ _____

Non membres 135\$ \$ _____

Cette somme couvre l'entrée à toutes les conférences scientifiques et à l'exposition commerciale, le petit-déjeuner du lundi et trois déjeuners.

Dimanche soir, le 9 mai

Buffet et danse

15\$ par personne \$ _____

Lundi soir, le 10 mai

Cocktail avec Peter Appleyard

Dîner-spectacle avec le groupe de Second City Revue

20\$ par personne \$ _____

Mardi soir, le 11 mai

Partie de plaisir — tenue de ville — danse

5\$ par personne \$ _____

Dames — Lundi, le 10 mai

Déjeuner et présentation d'une collection de fourrures à la tour du CN

15\$ par personne \$ _____

Mercredi, le 12 mai

Déjeuner au champagne

5\$ par personne (dames seulement) \$ _____

Total \$ _____

Dr. _____
(prénom) (nom)

Nom de l'épouse _____

Adresse _____

Afin d'éviter les pertes, les billets ne seront pas expédiés par la poste, mais retenus au comptoir des inscriptions faites au préalable qui sera situé à la mezzanine inférieure du Centre Sheraton où vous pourrez les cueillir le dimanche, 9 mai, à compter de 14 heures.

Mini-cliniques offertes au Congrès de Toronto

Neuf mini-cliniques auront lieu les lundi 10 mai et mardi 11 mai, lors du congrès conjoint de l'ADC et de l'ADO, qui se déroulera au Centre Sheraton de Toronto.

Le lundi, à 14 h 30, le Dr J.M. Hawkins, de Toronto, traitera de "L'anesthésie locale dans les années 80: la pratique courante", le Dr D.B. McAdam, également de Toronto, parlera de "La restauration des amalgames à l'aide de matrices ordinaires" et le Dr T.D.G. Lyons, d'Ottawa, traitera de "L'amibiase buccale: diagnostique et traitement des parasites de la

bouche chez les patients souffrant de périodontie."

À 15 h 15, les Drs L.M. Levin et A.J. Ferro, de Hamilton, traiteront des trois volets de la pratique générale, y compris l'esprit d'équipe. Au même moment, le Dr I. Habrowsky, de St. Catharines, parlera des applications de l'informatique à la médecine dentaire, alors que le Dr S.S. Schipper, de Toronto, présentera des suggestions pour améliorer la communication interne et externe au cabinet du dentiste.

Les mini-cliniques de 16 heures porteront sur les sujets suivants:

"Comment réussir dans les années 80", par le Dr D. Cowan, de Toronto; "Les embûches de l'endodontie et pourquoi maman ne m'a-t-elle pas prévenue qu'il y aurait des journées comme aujourd'hui", par le Dr B.H. Korzen; l'acupuncture, par le Dr H.J. Adirim.

Ces cliniques seront reprises le mardi 11 mai, sauf celle du Dr Adirim sur l'acupuncture, qui sera remplacée par une conférence du Dr W.H. Tester, de St. Catharines, sur la photographie à l'usage du dentiste, à 15 h 15.

Congrès de l'ACHD et de l'AHDO

L'Association canadienne des hygiénistes dentaires, celle de l'Ontario ainsi que l'Association des infirmières et assistants dentaires de l'Ontario tiendront leur congrès en même temps que l'ADC et l'ADO dont les assises se dérouleront du 9 au 12 mai au Centre Sheraton de Toronto.

Les hygiénistes dentaires se réuniront au *Holiday Inn Downtown*, immédiatement après l'assemblée de leur conseil d'administration national qui aura lieu les 7, 8 et 9 mai. La première journée du congrès comprendra un atelier qui durera de 9 heures à 17 heures à l'intention des éducateurs. Le même jour, on prévoit une randonnée familiale à 10 heures, une réunion d'affaires à 2 h 15, une séance d'inscription de 16 heures à 20 heures, et une soirée de mode et de fraternisation entre 19 heures et 21 h 30.

Le congrès lui-même commencera le lundi 10 mai dans la matinée, alors que se poursuivront les inscriptions. On servira le café et les brioches. De 9 h 15 à 11 h 45, le Dr L. Gilka donnera une conférence sur le rapport qu'il y a entre les additifs alimentaires, les allergies et la santé physique et émotionnelle. Suivra, à midi, le déjeuner à l'hôtel ou à bord d'un tramway d'époque

qui fera une randonnée dans la ville de Toronto.

Entre 14 heures et 15 heures, Mme Dale Scanlan traitera du "service dentaire aux handicapés" et Mme Jenny Thomas dira ce qu'elle entend par "ce petit quelque chose d'extra."

De 15 heures à 16 heures, Pat Johnson parlera des "établissements d'hygiène dentaire, un choix pour l'avenir?" tandis que les propos de Barb Long porteront sur "le thérapeute et l'hygiéniste dentaires dans le milieu académique."

L'assemblée générale de l'AHDO commencera à 16 h 15 et sera suivie, à 19 heures d'un cocktail au son de la musique de *Peter Appleyard* puis, à 20 heures, d'un dîner-théâtre présenté par le *Second City Revue*.

Le mardi 11 mai, le Dr M. Borins donnera, entre 9 h 15 et midi, une conférence sur la médecine holistique. Conférencier au déjeuner, le Dr George Benjamin a intitulé son entretien "15 000 ans sous la mer." De 15 heures à 18 heures, les participants auront l'occasion d'assister à des cliniques de table et de visiter l'exposition commerciale avant de se préparer à la réception des présidents de l'ACHD et de l'ACHDO, qui aura lieu

de 18 h 30 à 21 heures. Suivra une danse avec la musique des *Nova Sounds*.

Les mercredi 12 mai, petit déjeuner à 8 h 15, au restaurant tournant de la Tour du CN. Puis, de 10 heures à midi et de 13 h 30 à 15 h 30, Arlene Levin traitera du thème "Jusqu'au bout en dentisterie." Un buffet sera servi à 2 h 15.

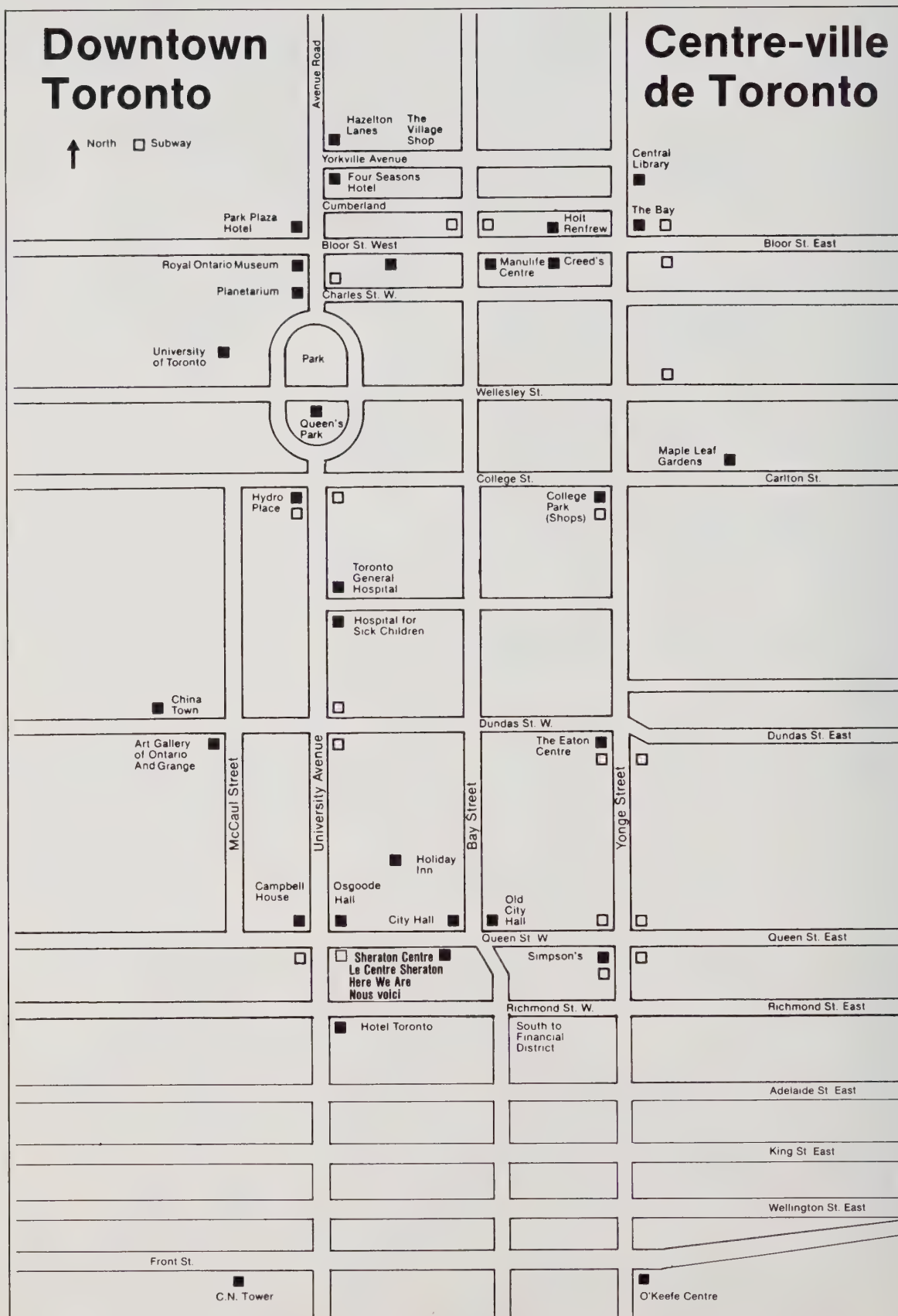
Rencontres des spécialistes

L'Académie canadienne de prosthodontie se réunira les 7 et 8 mai à l'hôtel Park Plaza, pendant que la Société de périodontie de l'Ontario en fera autant au Centre Sheraton. Les 8 et 9 mai, ce sera au tour de la Société canadienne des dentistes des services publics et de la Société canadienne d'orthodontie de se réunir au Centre Sheraton.

Le 9 mai également, auront lieu au Centre Sheraton les réunions de l'Académie canadienne de pédiodontie et de l'Académie canadienne de radiologie buccale. La Société ontarienne d'orthodontie se réunira également le 10 mai, à 19 h 30, au même endroit.

Congrès

Le site du Congrès 1982 Convention City 1982



Mise au point d'un implant de fluorure

Des chercheurs américains sont à la veille de mettre au point un implant de fluorure qui, selon une autorité canadienne en matière de dentisterie communautaire, marque une "étape utile" dans le développement de la technologie du dégagement lent des substances.

Pour le Dr John Stamm, professeur de dentisterie communautaire à l'Université McGill, de Montréal, et ancien président de la Société canadienne des dentistes des services de santé publics, il n'est pas aussi certain, cependant, que ce soit pratique de fixer à la dent un globule rempli de fluorure.

"On ne possède pas suffisamment de données pour conclure que les gens utiliseront l'invention, dit-il, et je ne crois pas qu'elle reçoive l'accueil souhaité."

Quant au Dr Dale Mirth, chimiste chargé de la recherche dans le cadre du programme de lutte contre la carie à l'Institut national de la recherche dentaire de Bethesda (Maryland) et l'un des premiers à explorer, au cours des sept dernières années, la technologie de l'implantation du fluorure, il est confiant de réussir et croit que l'invention pourrait être mise sur le marché dans quatre ou cinq ans.

Fluoration permanente

Il s'agit de fixer, avec du ciment dentaire, un globule à la paroi de la première molaire supérieure, du côté de la joue. Le globule, qui a la forme d'un petit haricot coupé de moitié, a à peu près la même taille que la molaire sauf qu'il en a le tiers de la longueur.

Le fluorure est mêlé au plastique à l'intérieur du globule. Une membrane extérieure en contrôle le dégagement.

"Le globule mis en place permet de toujours avoir du fluorure dans la salive, dans la bouche, d'expliquer le Dr Mirth. C'est comme si vous aviez de l'eau fluorée dans la bouche 24 heures par jour."

Selon lui, le procédé aurait comme effet "de renforcer l'émail et peut-être aussi d'aider à réparer les petites cavités qui auraient commencé de se former."

Dégagement progressif

On commencera bientôt, dans les écoles de Baltimore, une étude de six mois qui permettra de savoir si l'implant dégage correctement le fluorure sans causer d'irritation importante. Suivra une étude approfondie de la carie dentaire qui durera probablement deux ou trois ans.

Jusqu'ici, on n'a fait qu'une seule étude peu étendue. On a fixé deux implants aux premières molaires (un de chaque côté) de onze hommes qui les ont porté pendant cinq semaines afin de voir si le fluorure se dégageait et s'il y avait du danger.

Le Dr Mirth note que, dans une localité où l'eau est fluorée, la concentration de fluorure dans la bouche est ordinairement très faible — environ 0,04 partie par million. Avec l'implant, on constate que la salive contient de une à deux parties par million environ, soit une concentration de fluorure 20 à 30 fois plus élevée.

Environ 25 p. 100 des volontaires qui ont participé à l'expérience ont signalé une certaine irritation due au frottement du globule sur la joue, mais les chercheurs ont noté qu'en laissant l'implant en place l'irritation avait

tendance à disparaître. L'expérience terminée, 90 p. 100 des participants ont exprimé l'avis qu'ils porteraient l'implant de fluorure, s'il s'avérait efficace à prévenir la carie dentaire.

Les implants qui ont servi à l'expérience coûtent assez cher, parce qu'ils sont faits entièrement à la main au *Southern Institute* de Birmingham (Alabama). Le Dr Mirth estime cependant que la production massive en réduira le coût qui se situera entre 3\$ et 10\$ au moment de la mise en marché.

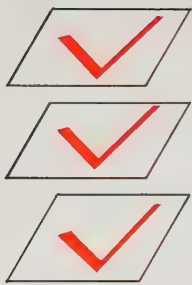
Si on arrive à fabriquer un implant qui durera six mois, comme c'est le but, on permettra à l'usager de le faire remplacer régulièrement lors de sa visite semi-annuelle chez le dentiste.

Deux genres d'implant sont en voie de préparation pour la deuxième phase de l'étude: l'un contiendra 10 milligrammes de fluorure et pourra en dégager 0,05 milligramme par jour, l'autre en contiendra 19 ou 20 milligrammes et en dégage 0,1 milligramme par jour.

Mesure sûre

Le Dr Mirth ajoute que l'implant est fabriqué de telle façon que le fluorure ne s'en échapperait pas entièrement d'un seul coup, s'il était endommagé. Et même si cela se produisait, ajoute-t-il, il n'y aurait pas de danger pour la santé.

À McGill, le Dr Stamm en convient. Il souligne que l'usager peut absorber d'un seul coup tout le fluorure de l'implant et, quand même, être loin d'atteindre la concentration dangereuse de fluor.



Indexation sur le coût de la vie

Supplément d'assurance Invalidité prolongée

Supplément d'assurance des frais généraux

Une nouvelle occasion d'améliorer vos garanties Invalidité

... sans justification d'assurabilité dans la plupart des cas

Plus de 2 000 dentistes ont profité de l'occasion qui leur a récemment été donnée par le régime d'assurance des dentistes du Canada d'améliorer de trois façons différentes leurs garanties Invalidité. Voici une nouvelle occasion d'en profiter, si vous ne l'avez pas fait la première fois.

Sous réserve des conditions ci-dessous, vous pouvez profiter des trois offres suivantes, sans justification d'assurabilité si vous faites votre demande avant le 15 mai. Les nouvelles garanties entreront en vigueur le 1^{er} juillet 1982.

Offre 1

Indexation sur le coût de la vie

Après un an d'indemnisation, l'indexation aura pour effet de faire augmenter vos indemnités de 10 % par an tant que vous continuerez à les toucher, jusqu'à 65 ans au besoin. Cette indexation sera toujours de 10 %, même si le taux d'inflation tombe au-dessous de ce niveau. Elle s'applique tant aux indemnités d'invalidité totale qu'à celles d'invalidité partielle, et peut s'appliquer à toutes vos garanties d'invalidité prolongée, y compris l'indemnité mensuelle de \$ 500 de l'offre 2.

Offre 2

Indemnité d'invalidité prolongée (facultative)

Que vous participiez ou non au régime, vous pouvez souscrire une indemnité mensuelle de \$ 500, qui vous sera versée si vous êtes dans l'impossibilité de travailler en raison d'une maladie ou d'un accident. La garantie maximum est de \$ 4 000 par mois (y compris les \$ 500 de la présente offre).

Offre 3

Assurance des frais généraux (facultative)

Que vous participiez ou non au régime, vous pouvez souscrire une assurance des frais généraux de \$ 500 par mois. Si vous êtes dans l'impossibilité de travailler en raison d'une maladie ou d'un accident, elle vous aidera à couvrir les frais fixes que vous continuerez à devoir supporter (loyer, services publics, salaires, etc.). La garantie maximum est maintenant de \$ 6 000 par mois.

Conditions

Vous pouvez demander à bénéficier de toute offre dont vous n'aviez pas profité la première fois (octobre-décembre 1981). Vous n'aurez pas besoin de justification d'assurabilité à condition de répondre aux exigences ci-dessous :

1. Vous devez être membre de l'ADC ou d'une association provinciale, ou être auxiliaire dentaire ou employé à plein temps.
2. Vous devez ne vous être vu refuser aucune assurance Invalidité par quelque assureur que ce soit depuis le 1^{er} janvier 1977.
3. Vous ne devez avoir reçu aucune indemnité d'invalidité de quelque assureur que ce soit depuis le 1^{er} janvier 1977.
4. Votre proposition doit avoir été envoyée au plus tard le 15 mai 1982, le cachet de la poste faisant foi.



**Le régime
d'assurance
des dentistes
du Canada**

**Appelez le service de renseignements
sans frais au 1.800.268.37.92
(961.71.17 à Toronto).**



Le régime
d'assurance
des dentistes
du Canada

EN MAJUSCULES S.V.P.

PROPOSITION D'ASSURANCE

Langue choisie : français ☐ anglais ☐

Nom du proposant (c'est-à-dire la personne à assurer)		Nom		Prénom usuel		Autres prénoms					
Adresse de facturation Rue		N° et rue		Ville		Province		Code postal			
Assurance sociale		Date de naissance Jour Mois Année		N° de téléphone (bureau) Indicatif		Sexe Masculin ☐ Féminin ☐		N° de compte		Facturation des primes Trimestriellement ☐ Annuellement ☐	
PROFESSION (Cocher la case utile)											
Dentiste ☐						Hygiéniste ☐					
Nouveau diplômé ☐						Employé ☐ Fonctions _____					
Étudiant ☐						Nom de l'employeur _____					
Membre de l'ADC : oui ☐ non ☐						☐ Aide dentaire agréé					
Organisme provincial _____						Les dentistes et les étudiants doivent être membres de l'ADC ou d'un organisme provincial.					
(nom de l'organisme)											

Offre 1

Indexation des indemnités d'invalidité prolongée

☐ Cocher ici si vous demandez l'indexation

Si votre assurance comporte deux périodes d'attente simultanées et que vous ne désirez appliquer l'indexation qu'à l'une des deux garanties, choisissez une des périodes d'attente ci-dessous :

☐ Période d'attente n° 1 (1^{er} jour accident/8^e jour maladie)

☐ Période d'attente n° 2 (31^e jour accident ou maladie)

Si vous ne faites pas de choix, l'indexation s'appliquera à l'assurance tout entière y compris l'augmentation facultative au titre de l'offre n° 2.

Offre 2

Augmentation facultative en assurance Invalidité prolongée

☐ Cocher ici si vous demandez l'augmentation mensuelle de \$ 500.

☐ 1^{er} jour accident / 8^e jour maladie (Période d'attente n° 1)

☐ 31^e jour accident ou maladie (Période d'attente n° 2)

But de la période
d'indemnisation :
Cocher la case utile)

Offre 3

Augmentation facultative en assurance des frais généraux

☐ Cocher ici si vous demandez l'augmentation mensuelle de \$ 500.

☐ 8^e jour accident ou maladie

☐ 15^e jour accident ou maladie

☐ 31^e jour accident ou maladie

Pourcentage
d'indemnisation :
Cocher la case utile)

☐ 100 % pendant trois mois

☐ 65 % pendant six mois

☐ 40 % pendant trois mois

☐ 100 % pendant 12 mois

Je, soussigné, demande à l'Impériale, Compagnie d'assurance-vie l'assurance ci-dessus. Je déclare qu'aucune proposition d'assurance Invalidité sur ma tête ne m'a été refusée depuis le 1^{er} janvier 1977 et que je n'ai reçu aucune indemnité d'invalidité à quelque titre que ce soit depuis cette date.* Je déclare que les renseignements fournis par moi sont vrais, précis et complets et que l'assureur peut s'y fier pour l'émission de mes contrats.

Signature du proposant _____ Date _____

* ☐ Cocher ici si vous vous êtes déjà fait refuser une assurance Invalidité ou si vous avez touché des indemnités et désirez demander à bénéficier de l'une ou l'autre de ces offres. Une proposition et un questionnaire médical vous seront envoyés par retour du courrier pour que votre situation puisse être réétudiée.

Veuillez retourner la présente proposition au : Canadian Dental Service Plans Inc.
2 Avenue St. Clair Est
Toronto, Ontario M4T 2W1

Neuf chiffres à retenir

Grâce aux efforts de l'Association dentaire canadienne, les dentistes du pays pourront pénétrer dans l'ère de l'informatique tout en diminuant les abus qu'on fait du numéro d'assurance sociale.

Le "numéro d'identité unique" est une idée lancée par l'Association dentaire de l'Ontario. On a déjà commencé à l'utiliser dans cette province et, avant la fin de l'année, ce sera le tour du Nouveau-Brunswick et de la Nouvelle-Écosse.

Composé de neuf chiffres, ce nouveau numéro remplacera celui de l'assurance sociale qu'on exige sur les formulaires de réclamation dentaire approuvés par l'ADC.

"On espère que le nouveau système sera établi à travers le Canada en 1983," a commenté le Dr Ronald Bartalos, dentiste d'Ancaster (Ontario) et président du Sous-comité des programmes et services dentaires du Conseil des soins de santé.

Bien que les autres provinces n'ont pas pris d'engagement précis comme le Nouveau-Brunswick et la Nouvelle-Écosse pour établir le nouveau système cette année, a déclaré le Dr Bartalos, celui-ci semble avoir été accepté de façon générale.

Un numéro fort pratique...

Le système des neuf chiffres a été agréé par le Conseil d'administration de l'ADC en août dernier. Les deux premiers chiffres servent à identifier la province où le dentiste a reçu son diplôme; les cinq chiffres suivants sont déterminés par les provinces (ce sera probablement le numéro assigné à chaque dentiste diplômé); et les deux derniers seront laissés à la discrétion des provinces pour des fins informatiques.

En Ontario, l'Association dentaire de la province a décidé d'inclure le numéro assigné à chaque dentiste au moment où il obtient son permis de pratiquer et il est vraisemblable que les autres provinces feront de même.

Le directeur administratif de l'ADO, M. John Gillies, prévoit que le numéro d'identité unique servira à d'autres usages que les réclamations dentaires parce qu'il "identifie chaque dentiste dans l'ordre où il a reçu son diplôme dans sa province ainsi que la province où il pratique." Les deux chiffres supplémentaires, a-t-il noté, peuvent être utilisés par les associations dentaires provinciales pour indiquer un renseignement de leur choix, telle la catégorie de spécialisation des membres.

"Comme il y a de plus en plus de dentistes et d'organisations dentaires qui font appel à l'informatique, il est nécessaire d'avoir un numéro pour les identifier," a ajouté M. Gillies. "Il sera très utile pour la profession dentaire de posséder un système unique dont elle se servira à travers le pays. Il s'agit du même principe que celui du code numérique utilisé pour identifier les dents."

L'idée de ce numéro d'identité unique a commencé à germer en 1980, devant les objections d'un nombre croissant de dentistes. Ceux-ci contestaient l'usage de leur numéro d'assurance sociale (NAS) à des fins d'identification sur les formulaires de réclamation dentaire normalisés lorsqu'ils avaient affaire à des assureurs agissant comme tierce partie.

D'autres raisons se sont ajoutées quand fut établie la Commission Kreber sur le caractère confidentiel des dossiers de la santé et que le gouvernement fédéral a commencé à faire des enquêtes sur les usages du NAS autres que sa raison d'être première.

Le système numérique a été mis au point par le *Prepayment Advisory Committee* de l'Association dentaire

de l'Ontario, présidé par le Dr David Sage, de Woodstock, et par son prédécesseur, le Dr David Anderson, de Windsor.

"Moins d'une demi-douzaine de nos 4 500 membres se sont plaints du nouveau système depuis qu'il a été mis en vigueur le 1^{er} janvier," a observé M. Gillies.

Quant aux compagnies d'assurance, elles acceptent bien le nouveau système. La plupart d'entre elles aimeraient qu'il soit appliqué à travers le pays, a ajouté le Dr Bartalos.

Discrétion assurée

Cependant, a-t-il précisé, bien que l'ADC a émis des directives à toutes les provinces en sollicitant leur collaboration, "aucune contrainte ni aucune pression n'a été exercée."

Ce changement ne crée aucun problème pour les compagnies d'assurance et c'est pourquoi elles l'acceptent volontiers. Elles espèrent maintenant que le système sera adopté par toutes les provinces le plus tôt possible afin de normaliser les procédures.

M. Jim Gill, ancien président du comité des régimes d'assurance touchant les services de santé de l'Association canadienne des compagnies d'assurance-personne (l'ACCAP), a déclaré que plusieurs compagnies d'assurance n'utilisaient aucun numéro dans le passé. Cependant, pour les dentistes qui indiquaient leur numéro d'assurance sociale, on exerçait la plus grande discrétion.

"Un autre avantage que comporte le nouveau numéro d'identité unique, c'est le fait que les compagnies qui utilisaient le NAS peuvent facilement modifier leur système," a fait observer M. Gill. "En effet, le NAS se compose de neuf chiffres également."

Recommandations du FCED

Le Fonds canadien pour l'enseignement dentaire a formé un comité ad hoc pour déterminer les catégories qui méritent d'être subventionnées en priorité. Ce comité a présenté au Conseil d'administration du FCED une série de recommandations s'échelonnant sur les cinq prochaines années.

Suivant le comité, la catégorie qu'il serait le plus urgent et le plus pertinent de subventionner comprend les projets visant, premièrement, à accroître le nombre des chercheurs indépendants capables de mener des études sur la planification de la santé en général et, deuxièmement, à former des chercheurs.

Le comité précise que l'on devrait prévoir pour cette catégorie:

- des subventions pour des professionnels de la santé compétents désirant entreprendre des carrières de recherche en matière de planification de la santé;
- des conférences, des échanges entre les facultés et des activités semblables pour les chercheurs dans ces disciplines;
- des subventions pour les doyens quand elles sont utilisées à des fins connexes;
- des bourses attribuées pour une période de deux à cinq ans à des membres choisis du personnel universitaire afin de défrayer une partie de leur salaire et de leur permettre de consacrer au moins la moitié de leur temps à l'étude et à l'application des méthodes de recherche dans les disciplines connexes.

Deuxième recommandation

Selon le comité, une autre catégorie, également tout aussi importante, couvre les projets ayant rapport à divers genres d'études en matière de planification de la santé dentaire. Un grand nombre d'études entrent dans cette catégorie. En voici quelques exemples:

- les études sur les effectifs dentaires;
- l'épidémiologie;
- les études sur les méthodes pour administrer les soins;
- l'accessibilité aux soins dentaires;
- les systèmes d'éducation en rapport avec la planification de la santé;
- les études sur la prévention des maladies dentaires;
- les besoins dentaires spéciaux et les soins fournis aux minorités et aux handicapés.

Troisième recommandation

De l'avis du comité, il est très important que le FCED continue à obtenir un appui des dentistes, des auxiliaires, des associations et de l'industrie dentaire.

On espère que les donateurs, voyant les avantages qu'ils tirent des projets subventionnés par le FCED, continueront à lui fournir leur appui.

Parmi les principaux projets qui procurent des avantages aux donateurs sont ceux qui ont trait à la qualité des services rendus par la profession. Par exemple:

- l'aide apportée pour appuyer les programmes d'éducation permanente et les cours de recyclage à l'intention des praticiens dentaires généraux, des spécialistes et des auxiliaires;
- les programmes d'internat des praticiens généraux;
- les programmes d'éducation visant à renseigner le public sur les services dentaires et sur la valeur de la santé buccale;
- de meilleurs professeurs en dentisterie pour les cours de recyclage et les divers programmes d'éducation permanente;
- l'établissement de meilleures méthodes d'agrément qui assureraient la qualité des pro-

duits des systèmes d'éducation.

Quatrième recommandation

Les rapports indiquent qu'il y a, au Canada, des régions où la population obtient peu ou n'obtient pas de services des spécialistes dentaires. Les praticiens généraux tout comme les spécialistes sont mal répartis à travers le pays et sans doute ce fait constituera-t-il toujours un problème. Cependant, au cours des prochaines années, ce problème sera probablement atténué, étant donné que les dentistes des centres urbains trouvent de plus en plus difficile de remplir toutes leurs heures de travail. Entre-temps, certaines régions sont privées des services des spécialistes dentaires. Il importe donc de les identifier et, si possible, de corriger cette situation.

C'est pourquoi le comité accorde une grande importance aux moyens d'appui qui encourageront les dentistes à étudier l'une des spécialités que l'Association dentaire canadienne reconnaît et pour lesquelles les ordres professionnels des provinces ont exprimé un besoin à l'intérieur de leur territoire. De plus, le Conseil d'administration devrait accorder une subvention à tout dentiste qui serait prêt à s'engager pendant quelque temps à fournir ses services dans une région défavorisée qu'on lui aura indiquée.

On pourrait ainsi accorder des subventions:

- aux étudiants d'une spécialité prêts à s'engager pour fournir leurs services;
- aux praticiens généraux désirant se perfectionner davantage afin de fournir des services spéciaux dans les régions où il n'y a pas de spécialistes;
- aux professeurs compétents prêts à visiter les régions où il n'y a pas de spécialistes afin de donner des cours de perfectionnement aux dentistes qui s'y trouvent.

Les Actualités

Cinquième recommandation

Bien que le comité n'ait pas proposé que l'appui accordé aux activités étudiantes soit nécessairement augmenté à l'heure actuelle, il a recommandé que l'on continue à seconder certains programmes étudiants telles les cliniques en table ronde lors des congrès nationaux et les conférences étudiantes.

Entre-temps, le FCED devrait avoir pour buts principaux, premièrement, de rendre les étudiants conscients du Fonds et des possibilités qu'il a de rendre un service unique à la profession et, deuxièmement, de leur obligation de maintenir et d'augmenter les services du FCED.

Réaction du Conseil d'administration

C'est en 1980 que le Conseil d'administration du FCED a créé le comité ad hoc pour déterminer les catégories

qui méritent d'être subventionnées en priorité au cours des cinq prochaines années. Le rapport du comité a fait une "profonde impression" sur le Conseil d'administration qui ne doute nullement que les recommandations faites seront d'une "valeur inestimable" et aideront le FCED à faire le meilleur usage possible des fonds qui lui sont confiés.

Le comité a appuyé ses recommandations sur diverses suppositions, y compris la conviction qu'il n'y aura pas de changements considérables dans la pratique de la dentisterie au cours des cinq prochaines années.

Le comité a également conclu que, selon toute vraisemblance, on ne créera pas de nouvelles écoles dentaires et le nombre des élèves dans les dix écoles dentaires actuelles n'augmentera pas pendant la même période.

De l'avis du comité, les ressources, tant en personnel qu'en argent, du FCED devront être augmentées de façon considérable. Il faudra obtenir plus de dons des fondations, des sociétés, des gouvernements et des groupes qui s'intéressent au bien public. De plus, a-t-on noté, le FCED doit continuer à solliciter des dons de la part des dentistes, des auxiliaires, des industries et des associations dentaires.

Le comité se composait du Dr William McIntosh, président, des Drs Robert Dupont, Harold Hillenbrand et John Nelson, de Mme Linda Strevens et de M. Arthur Zwingenberger. Le président du Conseil d'administration du FCED, le Dr James Guest, a fait parvenir une lettre à chacun d'eux afin de les remercier pour "un rapport aussi utile."

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Conférence de Glasgow sur le mercure

Lors d'une conférence tenue récemment à Glasgow, on a retenu huit déclarations touchant les dispositions actuelles en rapport avec l'utilisation du mercure dans les pratiques dentaires.

L'assemblée internationale réunissait 80 participants, des dentistes, des médecins et des scientifiques qui ont pris connaissance de 28 rapports sur les effets du mercure et sur la santé reliée à l'exercice d'une profession.

Les déclarations agréées sont les suivantes:

1. Plusieurs industries et milieux de travail reconnaissent depuis longtemps les dangers associés à l'utilisation du mercure. La présente conférence étudie les dangers possibles associés à l'utilisation du mercure dans les pratiques dentaires.
2. Nous recommandons que tous les membres du personnel dentaire (y compris les étudiants en dentisterie et les auxiliaires dentaires) soient renseignés, pendant leur formation, sur les dangers possibles que présente le mercure et sur les mesures qui existent pour les réduire ou les éviter. Les employeurs doivent être conscients des responsabilités qu'ils doivent assumer afin d'assurer des conditions de travail sûres pour leurs employés.
3. On doit toujours utiliser le mercure suivant les procédés qui en réduisent les dangers possibles.
4. Les interventions chirurgicales doivent être préparées de manière à éliminer ou à réduire les facteurs contribuant à créer des dangers possibles. Les associations dentaires de plusieurs pays ont présenté des conseils utiles à ce sujet.
5. L'emballage, l'entreposage, l'utilisation et l'élimination du mercure ou des matériaux contenant du mercure doivent se faire de manière à ne pas augmenter sensiblement les dangers possibles liés à l'environnement dans le milieu de travail

ou dans d'autres endroits.

6. En général, on doit disposer de services de consultation ou de contrôle (y compris de moyens pour s'occuper des fuites accidentelles de mercure).
7. Il faut pousser plus avant les recherches sur les effets biologiques du mercure afin d'établir objectivement les conséquences suivant une exposition à cet élément.
8. On doit favoriser l'élaboration d'autres matériaux ne contenant pas de mercure pour la dentisterie restaurative.

Les rapports présentés touchaient à divers problèmes. Ainsi le taux de mercure a fait l'objet de plusieurs recherches. Cependant, sauf dans les cas extrêmes, on a établi peu de rapports, sinon aucun, entre la présence de mercure dans l'organisme et les symptômes possibles qui peuvent en résulter. Des études faites en Écosse et aux États-Unis ont démontré que d'un à trois dentistes sur 50 présentent des désordres physiologiques à cause d'une exposition prolongée au mercure (aux États-Unis, les dentistes avaient plus de 50 ans). Ces désordres se manifestent surtout dans le système nerveux.

Toutefois, ce sont les dames dentistes enceintes qui sont le plus exposées aux dangers du mercure. Suivant une étude, celles qui continuent à travailler pendant leur grossesse

risquent d'avorter dans une proportion de 5,4 pour cent.

Pour minimiser les dangers de la contamination par le mercure, on recommande de bien ventiler le cabinet, de ne pas y poser de tapis et d'utiliser le mercure avec une prudence excessive afin d'en éviter les fuites. C'est seulement en appliquant des mesures préventives très sévères, comme on le fait au Japon, qu'on peut espérer éliminer les dangers associés à l'usage du mercure.

En Colombie-Britannique, des recherches ont démontré que la présence de vapeurs de mercure diffère grandement d'un cabinet dentaire à un autre.

Quelles que soient les mérites de cette conférence, elle n'a pas réglé les problèmes que pose la contamination par le mercure ni déterminer clairement les conséquences exactes des diverses concentrations dans l'organisme humain. Cependant, l'acceptation unanime des déclarations énumérées ci-dessus indique que le problème doit être considéré et éliminé grâce à des changements dans l'environnement et le comportement des travailleurs dentaires.

Cet article est dû à la plume de R.H. Roydhouse, professeur attaché au département de dentisterie restaurative, à l'Université de la Colombie-Britannique, à Vancouver.

Régime d'épargne-retraite de l'ADC

Les valeurs respectives du Régime d'épargne-retraite de l'Association Dentaire Canadienne étaient les suivantes au 28 février 1982.

<i>Fonds d'actions ordinaires</i>	\$48.9979
<i>Fonds à revenu fixe</i>	\$26.6661
<i>Fonds garanti</i>	\$22.5200
<i>Fonds de placement</i>	\$11.4066
L'avoir total (valeur marchande) du régime s'élevait à \$30,363,510.	
Au 31 janvier 1982, les chiffres du mois précédent étaient les suivants:	
<i>Fonds d'actions</i>	

<i>ordinaires</i>	\$50.8173
<i>Fonds à revenu fixe</i>	\$26.3203
<i>Fonds garanti</i>	\$22.2836
<i>équilibré</i>	\$11.9208

L'avoir total (valeur marchande) du régime s'élevait à \$30,412,151.

Pour de plus amples renseignements, veuillez écrire à l'adresse suivante: Canadian Dental Service Plans Inc., 2 St. Clair Ave. E., Toronto, Ontario, M4T 2W1, ou appeler le service de renseignements du CDSPI en composant 1-800-268-3792 (961-7117 pour les résidents de Toronto).

Les Actualités

En bref...

Dernièrement, quatre médecins de l'Hôpital universitaire de Sherbrooke, au Québec, ont reçu une subvention de 397 758\$ de Santé et Bien-être social Canada pour étudier les conséquences des habitudes alimentaires sur la santé des jeunes enfants.

Les Drs Jitka Vobecky, Pierre-Paul Demers, Dennis Shapcott et Josef Vobecky sont en train d'étudier les effets de l'alimentation sur la santé et le développement des enfants d'âge pré-scolaire, en portant une attention particulière au rapport existant entre le régime alimentaire et la santé des enfants de trois à six ans.

La subvention a été accordée par le Programme national de recherche et développement en matière de santé.

Les revenus du FCED ont atteint un nouveau record en 1981.

Le président du Fonds canadien pour l'enseignement dentaire, le Dr James Guest, a annoncé que les revenus s'élevaient à 239 000\$ en 1981, soit une augmentation de 12 pour cent par rapport à 1980. Les organisations dentaires ont offert 17 000\$, les commerces et les industries 83 144\$, les dentistes 68 136\$ et les hygiénistes 2 326\$.

Grâce à ces dons généreux, de déclarer le Dr Guest, les administrateurs du FCED seront en mesure de mieux promouvoir la santé dentaire.

Aux États-Unis et en Grande-Bretagne, le nombre des élèves qui s'inscrivent dans les écoles dentaires diminue. Dans les écoles canadiennes, cependant, on refuse des étudiants en première année.

C'est la deuxième année consécutive que l'ADA rapporte une diminution de ce genre. En Grande-Bretagne,

les demandes d'inscription venant d'outre-mer augmentent, mais les débouchés diminuent à cause des restrictions budgétaires.

Dans un mémoire présenté au gouvernement de la province, le *College of Dental Surgeons of British Columbia* a de nouveau déclaré qu'il désire conserver l'usage du certificat de santé dentaire, quand des dentiers complets sont produits par des procédés mécaniques. La *Public Denturists Society* tente d'abolir ce certificat attestant que la cavité buccale du patient a été examinée par un dentiste ou un médecin et qu'elle peut recevoir des dentiers du haut et du bas complets.

Le collège indique également que la deuxième école d'hygiène dentaire de la Colombie-Britannique commencera à donner des cours en septembre prochain, au *Douglas College* de New Westminster. Il s'agit du premier programme scolaire communautaire de la province. À l'Université de la Colombie-Britannique, on compte vingt étudiants en hygiène dentaire par année.

Les questions touchant la demande des services dentaires dans les cabinets privés constituaient la principale préoccupation des dentistes interrogés lors d'un sondage effectué par l'Académie de dentisterie générale aux États-Unis, en août 1981.

Suivant ce sondage, les dentistes sont préoccupés par le nombre croissant de diplômés sortant des écoles dentaires, par le faible pourcentage de la population qui visite régulièrement le dentiste, par l'intervention d'une tierce partie dans la relation entre le dentiste et le patient, et par les cabinets privés et indépendants qu'ouvrent les hygiénistes dentaires.

Les membres de l'Académie ont par ailleurs indiqué que celle-ci devrait avoir comme priorités d'améliorer la qualité des cours donnés en éducation permanente et d'établir une image favorable du dentiste grâce à une meilleure représentation auprès du public.

Le sondage a été effectué auprès de 2 100 membres de l'ADG aux États-Unis et les résultats ont été calculés à partir des réponses obtenues dans une moyenne de 41 pour cent.

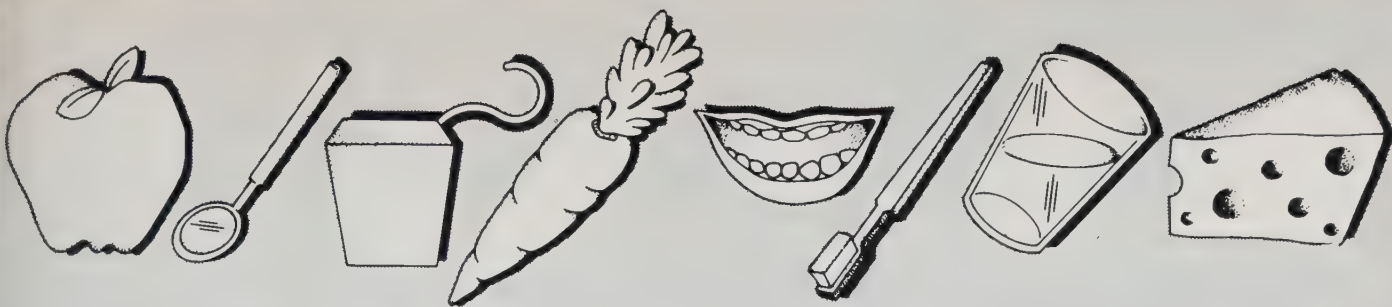
L'ADG a mené un pareil sondage auprès de ses membres canadiens, mais les résultats ne sont pas encore disponibles.

Selon un sondage d'opinion effectué aux États-Unis du 24 au 27 juillet 1981 auprès de plusieurs professions et métiers, le dentiste occuperait le troisième rang pour les normes élevées qu'il maintient touchant les principes d'honnêteté et les règles d'éthique. L'ecclésiastique se place au premier rang, suivi par le pharmacien, précise un bulletin de l'ADA.

Le comité spécial affecté à l'hygiène dentaire qu'a créé l'Association dentaire américaine a prévu quatre assemblées cette année afin de déterminer les principales préoccupations des hygiénistes dentaires en matière de travail.

On a invité les dentistes, les hygiénistes dentaires et le public en général à fournir des renseignements sur des questions importantes reliées à l'hygiène dentaire, tels la garantie d'emploi, les indemnités accordées à l'employé et les débouchés professionnels.

Le comité soumettra son rapport final plus tard cette année afin de déterminer les solutions possibles aux questions les plus pressantes.



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- La collectivité et son rôle en ce qui concerne l'hygiène dentaire.

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A Dynamic Approach to Restorative Dentistry

Leonard J. Seide

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Dr. Leonard J. Seide, along with eight contributing authors, has written a rather lengthy book to describe the application of interdisciplinary techniques and management considerations to restorative dentistry. The publication although not strictly a textbook does provide a blend of basic principles and clinical application so the dentist may achieve proper treatment results through a dynamic interaction of the necessary disciplines. As any practitioner in oral rehabilitation knows, in almost all cases the multidisciplinary approach to treatment is necessary for optimal results. This work describes the clinical roles of the various specialties along with sufficient background material in each of the speciality fields for the reader to be able to appreciate the workings and contribution of that speciality to the final treatment result. The book is directed toward broadening the utilization of diagnosis, treatment planning and the techniques of the various specialties of dentistry.

The author has stated in his preface that the volume is intended for use by the generalist, the specialist and the student. After reviewing the work, I believe the specialist who is active in some

phase of the restorative process would benefit along with the general practitioner who feels comfortable treating moderately difficult to complex rehabilitation. The student or the average generalist would most likely be somewhat overwhelmed and have little use for most of the contents.

Dr. Seide has done a skillful job in organizing the material of his eight contributors. Each of the authors has a chapter devoted to his own area of expertise with sections placed amongst these chapters in which Dr. Seide integrates the specialties and uses case presentations to illustrate the multidisciplinary approach to problem solving. Such dental speciality chapters as prosthodontics, periodontics, orthodontics, prosthodontic surgery, endodontics, esthetics and occlusion serve to provide a broad base upon which integrated treatment procedures may be built. The author refers to occlusion as being the "capstone" of restorative care, with treatment oriented around occlusion being a constant theme throughout the book.

Facets of rehabilitation which often are considered as peripheral to restorative therapy and hence do not usually appear in a publication of this type are discussed. Such areas include maxillofacial surgery, rhinoplasty, myofunctional therapy as well as speech rehabilitation and habit therapy. Each of these treatment options is dealt with in such a way that its relevance to restorative dentistry is illustrated. Knowledge of such diagnostic signs and treatment procedures may add significantly to a dentist's options in restorative and prosthodontic treatment.

Prepayment plans, in general, are discussed in terms of funding some or all of the phases of se-

quential restorative care. Since this is an American publication, the material in the prepayment chapter is with reference to practice in the United States. However, much of this is universal enough that it applies in Canada as well. This chapter also deals with principles of in-office secretarial administration, coping with the third party, development and modification of contracts, quality assurance, peer review, and types of insurance carriers and delivery systems.

Aside from the content and from a mechanical point of view, the format of this book is somewhat intimidating. The publication contains in excess of 800 pages printed with relatively small type. Although profusely illustrated, the pictures are exclusively black and white with the majority being only barely acceptable at best from a clarity and quality viewpoint. In addition, the reproduction of numerous x-ray films is of questionable quality. Although technically the book may be somewhat lacking, the presentation of a multitude of case histories to document various treatment techniques is well done and necessary for a work of this nature. The author has shown a good deal of personal experience and expertise in his authorship.

I recommend "A Dynamic Approach to Restorative Dentistry" to the specialist or serious student of oral rehabilitation. This is not a textbook nor would it be very useful, I believe, to the dental student nor many general practitioners of our profession.

This book was reviewed by Dr. Ronald A. Bannerman, Dalhousie University, Halifax, Nova Scotia.

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Cutting efficiency of carbide burs on two composite resins

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ABSTRACT

A comparison was made on two composite resins relating to cutting efficiency. Carbide burs with an air coolant and with an air-water spray coolant were analyzed under the following conditions; (1) constant weight and (2) constant speed. For the cutting of composites, it was found to be overwhelmingly more effective to use an air coolant. Further, Concise was noted to be more resistant to cutting than was the Adaptic.

Composites have long replaced silicates and unfilled resins for esthetic restorations. Some investigators¹ even advocate the use of preventive composite fillings in fissures with incipient decay as an alternate to sealants and amalgam fillings. Several investigators^{2,3} have researched the advantages and disadvantages of these filled resins when used in posterior teeth.

Like all filling materials, composites have a number of limitations. A coefficient of thermal expansion greater than tooth substance contributes to marginal leakage and percolation. An *in vitro* comparison of marginal leakage showed 95 per cent of unetched Concise with changes along the cavity wall.⁴ In spite of this difference in expansion, the marginal seal has been generally good when acid etching is used.⁵

While contraindications do appear, it is safe to assume that more composites will be inserted by the general dental practitioner, especially as the cost of precious metals escalates. With the expanded use of these materials, followed by the greater probability of replacement, it is of clinical significance to learn an efficient method of removing these

restorations. Thus the objective of this study is to compare burs on composites with an air coolant alone versus an air-water spray coolant.

MATERIALS AND METHODS

Thirty-nine new No. 256 plane fissure carbide burs* were operated under a monitored air system, in an ultra-high speed dental contra angle handpiece. To determine the cutting efficiency of the burs with the two different coolants, two analytic parameters were used. One utilized a constant weight of 110 grams, in which 20 of these carbide burs were tested (five burs each on Concise** and Adaptic+ with an air coolant; an additional five burs per resin for the cutting evaluation of the air-water coolant). The other method consisted of a constant speed of 0.21 mm/sec., as measured on an Instron testing machine. Nineteen burs were analyzed under this testing condition (five burs each judged using an air coolant on Concise and Adaptic; nine burs were incorporated for the air-water study of the two composites). Resin samples were carefully placed in a rectangular mold which excluded air from all surfaces during setting. They were cured for 15 minutes at room temperature and then stored at 37° C in a normal saline solution until ready to be tested. At this time, each new bur made two linear cuts per sample; this procedure was repeated until the bur no longer effectively cut the test composite (stall out). The volume of material removed by each bur was then calculated.

*Beavers Dental Products, distributed by Midwest American, Melrose Park, Illinois, U.S.A.

**3M Company, St. Paul, Minnesota, U.S.A.

+Johnson & Johnson, East Windsor, New Jersey, U.S.A.

Figure 1 shows the average volume removed for five burs in each of four categories. The ratio of Concise is about 13:1 air versus air-water coolant. Adaptic exhibits a ratio of nearly 24:1. Note that nearly twice as much Adaptic as Concise was removed with the air coolant.

With the constant speed technique, there was appreciably more volume removed with air than with air-water coolant. For Concise the ratio was 35:1, while with Adaptic, it was an impressive 78:1. This is exemplified in Fig. 2. Observe again that Concise is more resistant to cutting than is Adaptic.

As the bur dulls, it is only reasonable to expect that it will take more time to remove the composite. This was indeed borne out in the experiment — by a factor of about four. While using air-water coolant, some burs failed to remove even 14mm³ of resin.

In the second technique, where the force was varied, the Instron machine measured three to six times more grams for the last volume removed, compared to the first, when the bur was new. The practising dentist has no doubt felt the drag on the bur after continued use.

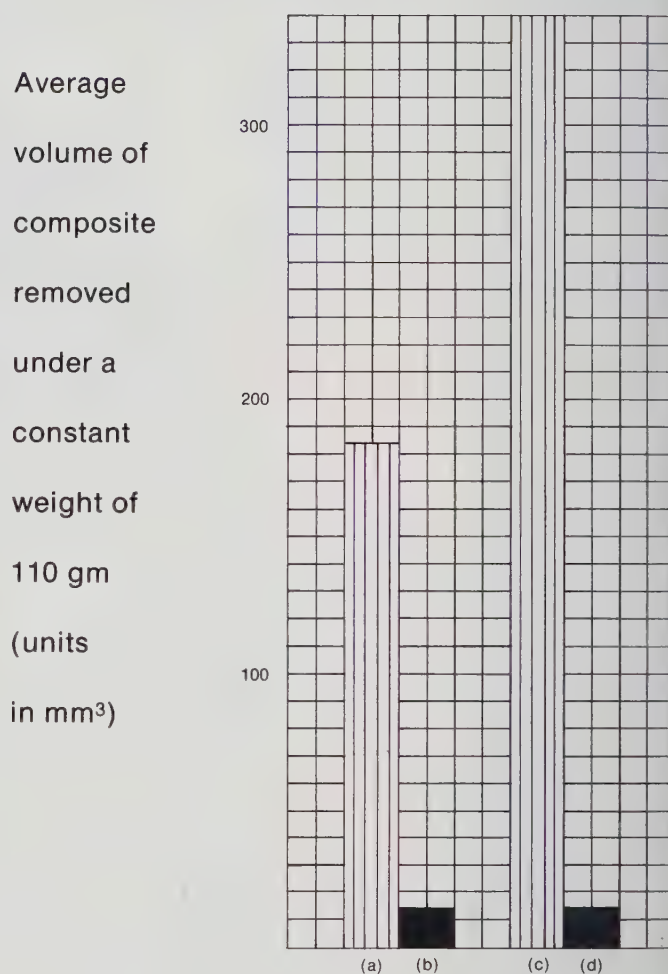
With the evidence that cutting these composites is much more efficient with an air coolant, we now turn our attention to two areas of biological concern. In removing composite restorations, extreme care should be taken so as not to create excessive heat when cutting closer than 2 mm to the pulp.⁶ Intermittant light cutting of a second or so with release from tooth contact for a few seconds minimizes frictional heat build up, thus preventing pulpal damage.⁷ The second concern is a precaution not to inhale air-borne particles of the composite, as the body cannot effectively resorb these particles and adverse reactions may develop.⁸ High volume evacuation and a mask are recommended when cutting these resins with an air coolant.

Statistical Analysis

Inspection of the data would indicate that by either method, i.e., constant weight or constant speed, it is much more productive to cut these composite materials at ultra high speeds with air coolant. This is indeed borne out statistically using the *t* test for the difference of the means. In each of the categories, of Figures 1 and 2, a highly significant difference ($P < .001$) was obtained.

A further investigation revealed a highly significant statistical difference between the amount of Concise removed as compared to Adaptic under constant weight ($P < .001$), and a significant difference under constant speed ($P < .05$). Thus, it is to be concluded that Concise is a material which is more resistant to cutting than is Adaptic.

FIGURE 1
COMPOSITE REMOVED UNDER
A CONSTANT WEIGHT OF 110 GM

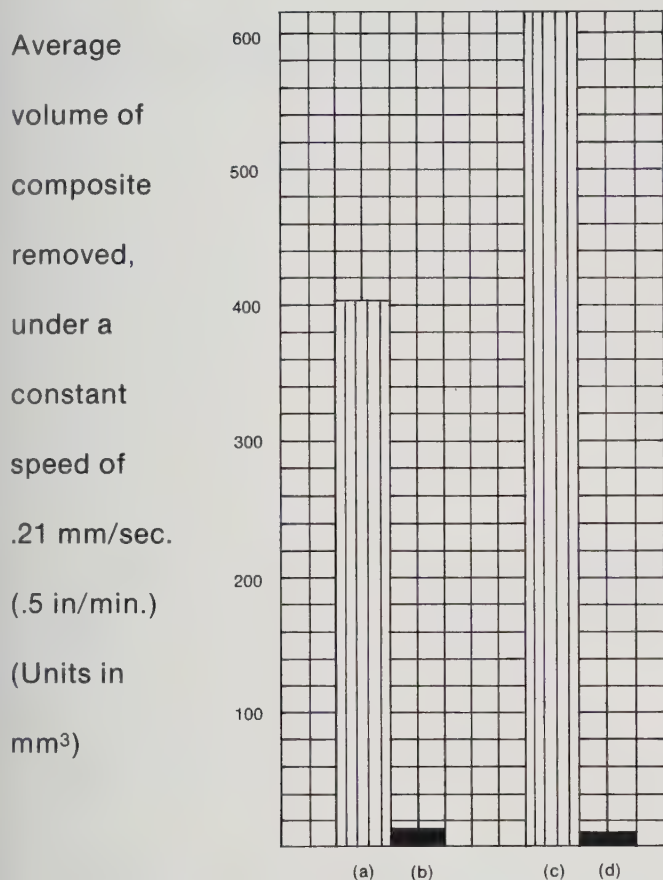


- (a) Concise (air-coolant)
- (b) Concise (air-water coolant)
- (c) Adaptic (air-coolant)
- (d) Adaptic (air-water coolant)

	Air-Coolant (units in mm ³)			Air-Water Coolant (units in mm ³)		
	Range	Mean	Standard Deviation	Range	Mean	Standard Deviation
Concise	138.55 to 289.51	184.70	62.38	5.84 to 22.58	13.92	7.56
Adaptic	300.73 to 503.19	366.62	79.75	7.63 to 22.50	15.34	6.24

FIGURE 2

**COMPOSITE REMOVED UNDER
A CONSTANT SPEED OF .21 mm/sec. (.5 in/min.)**



- (a) Concise (air-coolant)
(b) Concise (air-water coolant)
(c) Adaptic (air-coolant)
(d) Adaptic (air-water coolant)

Air-Coolant (units in mm ³)				Air-Water Coolant (units in mm ³)		
	Range	Mean	Standard Deviation	Range	Mean	Standard Deviation
Concise	223.12 to 766.69	407.43	215.75	503 to 14.90	11.49	3.80
Adaptic	438.29 to 759.83	649.42	137.57	6.58 to 9.54	8.32	1.38

SUMMARY

New No. 256 plane fissure carbide burs were tested for cutting efficiency using air versus air-water coolant on Adaptic and Concise composite resins. Two techniques were employed, one utilizing a constant weight of 110 grams and the other employed a constant speed of 0.21 mm/sec. (15 in/min.).

Statistically, Concise was found to be more resistant to cutting than Adaptic under all the above conditions. The evidence is overwhelming that, with these composite resins, the burs cut longer and more effectively with air coolant alone than with air-water coolant. It would, therefore, be advisable for the clinician to consider removing composite restorations while using air coolant. However, caution must be taken to prevent pulpal damage from the resulting heat. The technique of intermittent cutting is recommended. Further, care should be taken so as not to breathe cut particles that are air-borne, since the body cannot effectively resorb these foreign materials.

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The effect of condensation on adaptation and void formation using various dental amalgam alloys

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SUMMARY

Three dental amalgams were condensed under applied loads of 2, 5 and 10 lbs of force using hand and pneumatic condensation. The samples were observed for marginal adaptation and voids. The dispersion phase and ternary amalgam alloys had significantly better adaptation and fewer voids than the cut conventional amalgam alloy. Hand condensation produced superior results than pneumatic condensation for all three dental amalgam alloys. The small rounded condenser tip produced the best adaptation for the dispersion phase and ternary amalgam alloy, but the large condenser tip gave the densest overall restoration for the ternary amalgam alloy.

INTRODUCTION

The influence of alloy particle size on the properties of dental amalgam has been recognized for a number of years^(1,2,10). It has also been shown that the strength of the material is a function in part, of the condensation pressure applied during introduction of amalgam to the tooth^(3,4,10). In early studies^(5,6), differences in amalgam alloys were not considered to be a factor in clinical failure. However, more recent investigations^(7,8,9) show that amalgam alloys do not demonstrate the same clinical performance. Of particular significance in these results was

the clinic superiority of a dispersed-phase alloy whose amalgam showed essentially no Sn-Hg phase (γ_2 phase). The success of this alloy has led to a proliferation of other alloys with little or no γ_2 phase in the final set dental amalgam. A ternary amalgam alloy system with a graded composition of elements through the spherical particles has also been developed. This system reacts with mercury to form the set dental amalgam without any γ_2 phase and physical properties which are superior to the conventional amalgam. Both systems are now recognized as providing an amalgam restoration which is clinically superior to the older alloy systems.

However, whichever alloy system is used for the clinical amalgam restoration the condensation technique is a critical step in the amalgam manipulation. Differences may be achieved between hand and mechanical condensation and they also depend on the applied condensation pressure⁽¹⁰⁾. This study shows the adaptation of the amalgam to a preparation which can result from varying the condensation pressure with different amalgam alloy systems. Loads in excess of 10 lbs. (4.5 Kg) are within the range developed by dental students and loads of 5 lbs. (2.25 Kg) are routinely achieved⁽¹¹⁾.

MATERIALS AND METHODS

Clear plastic dies were prepared as split molds suitable for vertical condensation of the dental amalgam. Three

circular shaped cavities, 9 mm in diameter were made in each die for the samples to be condensed under three different loading forces. Three amalgam alloys, Microcut*, a conventional alloy, Dispersalloy**, a dispersion phase alloy and Tytin***, a ternary alloy were chosen. Double spill mixes of each alloy were triturated with mercury in a Silamat+ amalgamator at a fixed speed for a time as recommended by the manufacturer. Using a 'Premier' amalgam carrier increments of the plastic mass which measured 5.2 mm x 22 mm and weighed .18 gm approximately, were transferred to the dies and condensed with hand or mechanical condensation. Table 1 lists the various sizes of round-faced hand condensers† and pneumatic condenser heads‡ which were used and the forces applied to the material. Two, five and ten pound forces were achieved by placing the dies on a balance pan and controlling the load applied as the different amalgams were condensed with each condenser. All the amalgam was introduced and condensed in the die within a period of one minute using a sustained vibrating thrust with each increment. Samples were allowed to harden for 24 hours at 37° C before the dies were separated and the interface was photographed. A magnification of five times was made for each photograph. Visual ratings of the set amalgam samples and photographs were made under each condensing

force. Adaptation to the die walls and tendency to voids in the samples were observed.

RESULTS

Comparing the samples prepared with Microcut amalgam alloy (Figure 1-10) the photos showed generally poor adaptation to the die with numerous voids in the material whatever pressure of condensation or type and size of condenser were used (Figures 1, 4 and 7). The best adaptation with fewest voids in the set amalgam was found to be from condensation with the 1.5 mm round-faced hand condenser using 10 lbs. of force. Microcut amalgam appeared to be better condensed by hand rather than with pneumatic condensation.

Dispersalloy amalgam showed overall improved adaptation to the dies in all three types of condensation (Figures 2, 5 and 8). The best adaptation was obtained with increased condensation force for all the condensers used. There was no marked difference between hand and pneumatic condensation. Few voids were observed in all the samples. Use of Tytin amalgam showed differences in adaptation depending on the size and method of condensation (Figures 3, 6 and 9). The 1.5 mm hand condenser

Table 1

Amalgam condensers, alloys and condensation pressure to prepare dental amalgam samples.

Condenser type and size	Alloy type	Forces lb.
1. Hand 1.5 mm round face	Microcut	2, 5, 10
2. Hand 1.5 mm round face	Dispersalloy	2, 5, 10
3. Hand 1.5 mm round face	Tytin	2, 5, 10
4. Hand 3.0 mm round face	Microcut	2, 5, 10
5. Hand 3.0 mm round face	Dispersalloy	2, 5, 10
6. Hand 3.0 mm round face	Tytin	2, 5, 10
7. Pneumatic 2.0 mm round face	Microcut	2, 5, 10
8. Pneumatic 2.0 mm round face	Dispersalloy	2, 5, 10
9. Pneumatic 2.0 mm round face (Elliptical)	Tytin	2, 5, 10
10. Hand (Diamond) Hand (Square)	Tytin	5

*L.D. Caulk Co., Milford, Delaware, U.S.A.

**Johnson and Johnson, Montreal, Quebec, Canada

***S.S. White, Philadelphia, Pennsylvania, U.S.A.

+ Williams-Justi, Fort Erie, Ontario, Canada

† American Dental Manufacturing Co., Missoula, Montana, U.S.A.

‡ Teledyne Densco, Denver, Colorado, U.S.A.

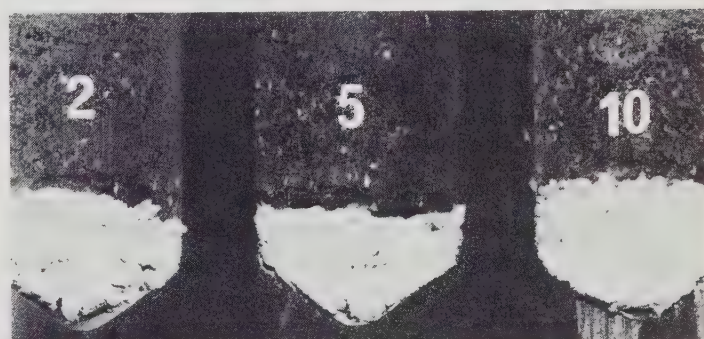


Figure 1. Microcut dental amalgam, hand condensed with 1.5 mm diameter round face condenser under 2, 5 and 10 lb. forces.



Figure 2. Dispersalloy dental amalgam, hand condensed with 1.5 mm diameter round face condenser under 2, 5 and 10 lb. forces.

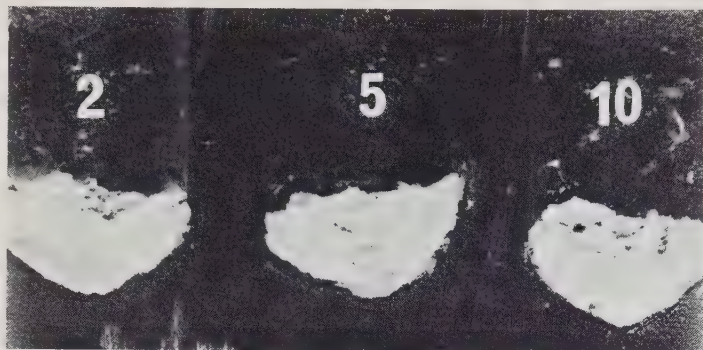


Figure 3. Tytin dental amalgam, hand condensed with 1.5 mm diameter round face condenser under 2, 5 and 10 lb. forces.

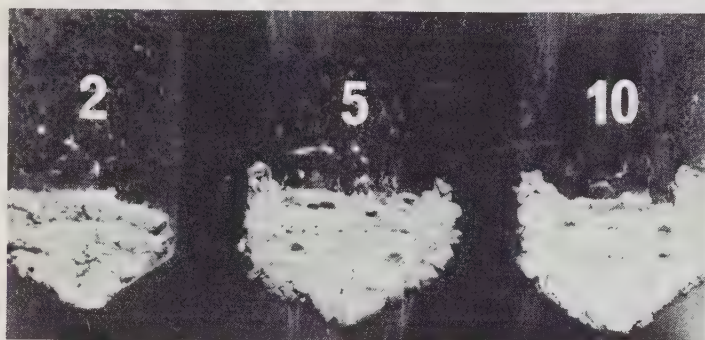


Figure 4. Microcut dental amalgam, hand condensed with 1.5 mm diameter round face condenser under 2, 5 and 10 lb. forces.

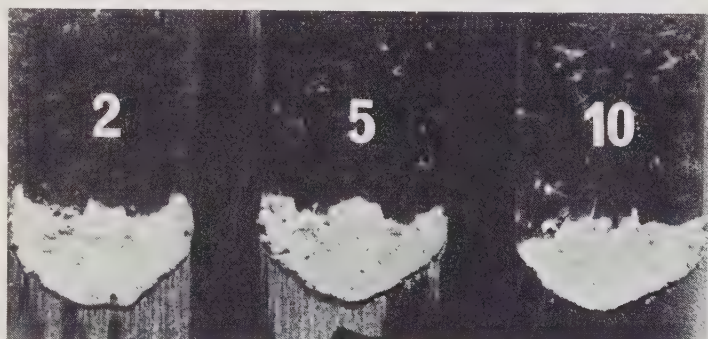


Figure 5. Dispersalloy dental amalgam, hand condensed with 1.5 mm diameter round face condenser under 2, 5 and 10 lb. forces.



Figure 6. Tytin dental amalgam, hand condensed with 1.5 mm diameter round face condenser under 2, 5 and 10 lb. forces.

had good adaptation to the die and minimal voids with 2 lb. pressure in condensation. However, the surface layers of the amalgam showed marked voids. With the 3.0 mm diameter round-faced hand condenser adaptation was improved and did not appear to be dependent on the condensation pressure. Surface voids were fewer than with the smaller condenser tip. The amalgam samples pro-

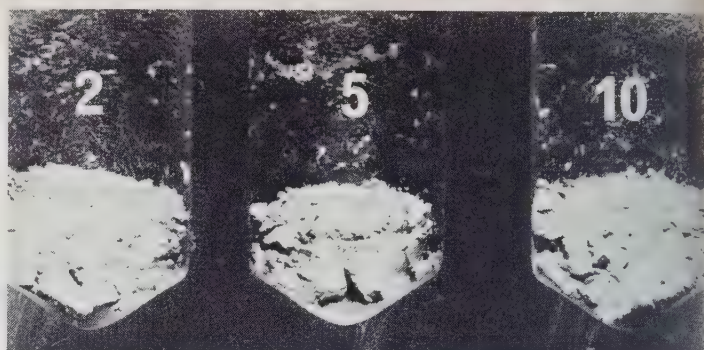


Figure 7. Microcut dental amalgam, pneumatic condensation under 2, 5 and 10 lb. forces.



Figure 8. Dispersalloy dental amalgam, pneumatic condensation under 2, 5 and 10 lb. forces.

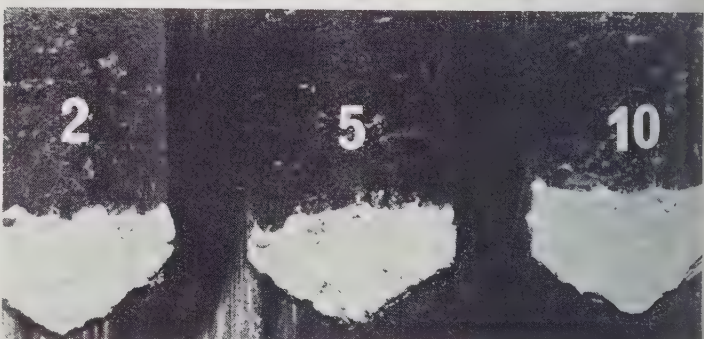


Figure 9. Tytin dental amalgam, pneumatic condensation under 2, 5 and 10 lb. forces.

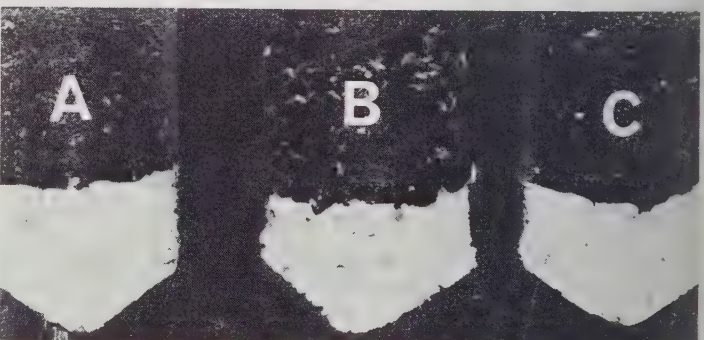


Figure 10. Tytin dental amalgam hand condensed with elliptical (A), diamond (B), and square (C) ended condensers under a 5 lb. force.

duced by pneumatic condensation showed overall poorer adaptation to the dies than from hand condensation with some internal voids. However, a 10 lb. condensation pressure gave a well adapted and void free sample. It is hypothesized that voids seen in samples at the die-wall interface would be found throughout the set amalgam. It would also follow that the samples with the greatest

number of voids would result in a weaker union of increments.

Using the elliptical, diamond and square ended condensers to adapt Tytin at 2 lbs. pressure showed poor adaptation of the amalgam to the die surfaces with voids at the margins and in the bulk of material (Figure 10). Comparison of the different condenser tips used at 2 lbs. pressure showed that the 1.5 mm condenser had the densest amalgam within the mass but was inferior to the other four tips at its surface (Figures 3, 6 and 10).

Another comparison between the types of amalgam alloys used showed that with the small hand condenser tip (1.5 mm), Dispersalloy had the best adaptation and fewest voids throughout. However, Tytin alloy also had minimal voids in the body of the restoration using this type of condenser (Figures 1, 2 and 3).

A larger hand condenser tip (3.0 mm) produced the best adaptation and the fewest voids with Tytin amalgam alloy at three different pressures. Slightly poorer adaptation, particularly at lower condensation pressure was noted with Dispersalloy (Figures 4, 5 and 6). Whatever size or condensation pressure was used, Microcut amalgam alloy showed the poorest results.

Pneumatic condensation showed similar results with Dispersalloy and Tytin amalgams with some voids in the bulk of the material at the lower condensation pressures. Ten lbs. of condensation pressure produced the densest material for both amalgams. Microcut amalgam showed inadequate adaptation and gross voids at all condensation pressures.

DISCUSSION AND CONCLUSION

The condensed amalgam samples are shown in figures 1 to 10. Each has the material condensed at three variable condensation pressures and with different condenser tips.

Hand condensation pressures of 10 lbs. of force were difficult to sustain and would create stress to the operator if many amalgam restorations had to be condensed. Generally a force about 5 lbs. of condensing pressure is acceptable for operator comfort and produces a restoration with a minimum number of minute voids which appears to be clinically acceptable.

Since the load force and condensation methods were the same for each different amalgam alloy, the variation in the adaptation and the void formation can be related to the size and shape of the alloy particles in the mass and on the rate of hardening of the amalgam. Large, rough, irregular particles are more difficult to compact, whereas irregular and/or small type spherical particles pack more readily and densely in a given volume.

With the small condenser at the maximum load, the head tends to punch through the spherical type copper-rich alloys and little true condensation of the material occurs. The larger condenser better compacts the spherical alloy particles together and against the walls, and results

in fewer voids. Also, round faced hand condenser tips appear to adapt the amalgam better than other shapes. One may conclude that hand condensation was superior to the pneumatic condensation used for these laboratory experiments.

Clinical Relevance

The results demonstrate that amalgam condensers with appropriate diameters are indicated for the various types of copper-rich alloys that are available. As a result, one may vary the condensing force and condenser diameter to suit the characteristics of the alloy selected for clinical practice. The objective remains the same, i.e. thorough compaction of the alloy particles in the mass and intimate adaptation of amalgam to the cavity preparation in the completed restoration. Utilizing modern alloys and mechanical amalgamators, a sustained vibrating thrust with reasonable force on a hand condenser face of the correct diameter will result in a well condensed amalgam restoration exhibiting the maximum in physical properties. Careful cavity preparation, matrix selection, wedging, interproximal contact placement, contouring, systematic burnishing and/or finishing procedures, occlusal considerations and a healthy periodontium are the remaining variables that complement thorough condensing techniques.

Dispersion phase and ternary amalgam alloys can be recommended over the conventional fine and microcut alloys as they show better adaptation and fewer voids in the material, whatever condensation pressures are applied or type of condenser tip is used especially Tytin.

The authors acknowledge the technical assistance of G. Fichter and L. Koroluk, fourth year dental students (1980-1981) at the College of Dentistry, University of Saskatchewan, Saskatoon.

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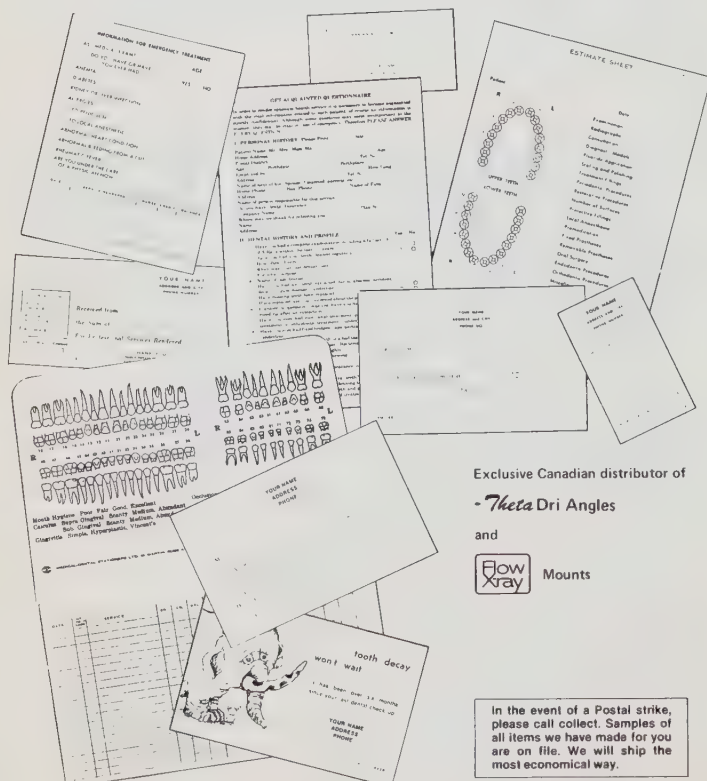
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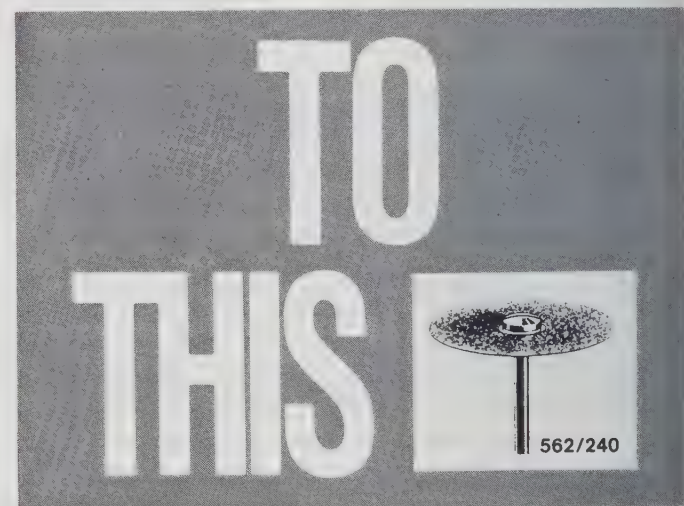
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Selective Radiography Instead of Screening Pantomography — A Risk/Benefit Evaluation

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SUMMARY

Our use of screening radiographs, panoramic or CMS, may represent for some groups of patients unproductive use of radiation. This kind of radiographic practice is evaluated in comparison with selected periapical films prescribed on the basis of clinical indications. In the young adult group examined, the results indicate no significant diagnostic information was overlooked by eliminating the screening films. Therefore reliance on clinical criteria appears to be a safe, effective method of selecting radiographs and contributing to radiation thrift.

Increasing public and professional concern over the levels of ionizing radiation used for diagnostic purposes has stimulated the health professions to examine and assess the efficacy of techniques, the selection of patients and the number, types and frequency of exposures. Modern equipment, with appropriate collimation, filtration, fast emulsions and intensifying screens, has very significantly reduced patient exposure. It is now believed that only in the field of patient selection can significant further reductions in population exposure be achieved. Estimates of the amount of unproductive exposure due to over-utilization range as high as 30 per cent of the current population dose.¹ Recommendations for the elimination of unproductive exposure should not be construed as suggestions to reduce medical or dental diagnostic films.

In dentistry, the automatic requirement of a complete mouth series of intraoral radiographs and/or a pantomograph for new patients, and bitewing examinations for recall patients, *prior to* clinical examination has become subjects of both public and professional debate. While we have generally regarded these procedures as diagnostic examinations, they are, in many instances, more accurately described as screening, survey or health investigations;^{2,3} i.e. x-ray examinations conducted to detect abnormalities in asymptomatic persons. Such examinations have come under intense scrutiny in medicine and have in large measure been discarded for lack of evidence of significant benefit to the patient. Our continued use of this type of radiography will require similar proof of significant contribution to the patient's dental health management. Even though dentistry's contribution to the total population exposure is very small, we believe it is important to share in limiting radiation, not only because it is a professional obligation but also because of our widespread use of screening films.

In medicine, two areas can be cited where attempts to reduce unnecessary exposure have been effective. The first involves selective radiography for the *symptomatic patient*. Selection of the patient refers to the process by which the physician determines whether an x-ray examination would provide information important to diagnosis and clinical management of the suspected or known condition. To reduce ineffective use of radiation, many hospitals have established policies on x-ray utilization which

operate through the use of selection criteria. These are examination or history findings which have been shown by retrospective investigation to ensure a significant information yield of benefit to the patient. The selected criteria are used to prepare a "High yield criteria list" (HYCL). A patient presenting with any of the appropriate signs or symptoms should have the needed radiographs. This method has been effectively employed to significantly reduce unproductive radiographs; for example, in skull trauma where films had been *routine* in *all* cases. By this means, patients are selected on the basis of clinical assessment of the individual diagnostic problem and not by protocol. The use of high yield criteria lists has resulted in reductions of up to 30 per cent for many kinds of films.¹

The second area where significant reductions have been made involves the use of survey or screening x-ray examinations. Examples of common health investigations are: mammography to detect occult breast cancer, lumbar spine x-ray examination as pre-employment records for job applicants in heavy industry, and chest examination for tuberculosis and lung cancer. Screening examinations have been practised where the incidence or contagiousness of the disease has been believed to warrant the expense and radiation exposure. Re-evaluation of the efficacy of these procedures has been sobering.¹ When large-scale studies showed no measurable benefit from routine mammography for women under 50 years of age, and because of the presumed hazard, the U.S. National Cancer Institute recommended discontinuance for these age groups. The same conclusions were reached for chest and spine examinations. Routine x-ray screening for tuberculosis is considered effective only for groups *known* to have a high incidence. With respect to lung cancer, current programs of radiographic screening (U.S.) have not shown any evidence of reduction in patient mortality.¹ The only screening examinations currently practised in the U.S. are mammography for post-menopausal women and radiography for dental patients.³ In the former there is a *known* significant risk-benefit ratio for the patient, whereas for dentistry, with the exception of bitewing radiographs for new patients,^{4,5} there is *no such information*.

Dental radiographic surveys may encompass all new patients, often regardless of age, previous history of dental and medical radiographs or dental health status. The same survey may be taken for either the dentally healthy young adult, the middle-aged patient with extensive dental problems or the teen-aged patient with caries. All this shows little evidence of selectivity in the prescription of radiographic services. This lack of professional judgment justifies the description of such radiographic procedures as

screening or health investigations rather than diagnostic services.

There are historical reasons for our methods and an understanding of the evolution of dental radiographic practice is important for proper perspective. During the first half of this century, when dentists were overwhelmingly concerned with restoration of decayed and missing teeth, dental examination was confined to a physical investigation with a mirror and explorer, sometimes supplemented by bitewing radiographs. In the era following the second world war, increasing interest and knowledge of periodontal disease, children's dentistry and oral medicine produced the current concept of the dentist as a member of the health sciences team concerned with the total welfare of a patient. Teaching units in oral diagnosis were established to promote the concept and provide the skills. The complete series of intraoral radiographs became such an essential part of the examination method that in many dental schools all patients admitted for comprehensive care were automatically programmed for such radiographs *prior* to examination. Eventually, the procedure became a hallmark of the highest quality in dental practice. In some cases, the pantomograph may now have been added to the radiographic examination either as a supplement to or instead of the complete mouth series. What was believed to be a desirable goal, attained in large measure by conscientious practitioners, has become the current focus of criticism.

In the present climate of concern about over-utilization of diagnostic x rays, we cannot avoid a re-evaluation of our procedures. These will need to satisfy the premise that the only justification for deliberately exposing a patient to ionizing radiation is a reasonable expectation of information of direct benefit.⁶⁻⁸ As in medicine, we will need to evaluate the efficacy of our radiographic practices by appropriate clinical studies.

The following study was designed to test the premise that radiographs, specific and unique for each patient (exclusive of bitewings), could be safely and accurately prescribed on the basis of indications from clinical history and examination. To give guidance to the clinicians in selecting the needed films, the use of a high yield criteria list is evaluated.

METHOD

The young adults chosen for study represent only one group of patients where the productivity of screening radiographs could be assessed. These patients had to satisfy the following criteria:

1. non-complicated medical history

2. absence of obvious periodontitis
3. absence of severe malocclusion
4. essentially complete dentition
5. no extensive restorative or rehabilitative dentistry
6. no prosthetic or orthodontic appliances
7. no history of jaw fracture or surgical procedure for oral pathosis.

The study group was selected from patients seeking treatment in the teaching clinics of the Faculty of Dentistry, University of Western Ontario. Acceptable patients received a panoramic radiographic and posterior bite-wings (two or four) as determined by the age of the patient and the size and shape of the dental arch. The need for periapical films was determined, whenever possible, at this initial examination by reference to a high yield criteria list. In a few cases, the detailed history and clinical examination disclosed indications for additional periapical radiographs.

High Yield Criteria List

1. Clinical absence of any tooth without a history of extraction.
2. Distinctly malposed or clinically impacted tooth.
3. Traumatic injury to a tooth manifested by fracture, colour change or excessive mobility.
4. Extensive restorations; including complex intra-coronal and ill-fitting or poorly designed extra-coronal restorations and crowns.
5. Symptoms or signs of pulpal or periapical inflammation. Teeth with sedative dressings or indirect pulp capping treatments.
6. Gross decay.
7. Pain related to teeth with no evidence of odontogenic origin.
8. Pathologic changes not related to teeth; for example, a non-tender expansion of the cortex of the jaws due to a cyst or tumour.

The clinical examinations were supervised by two instructors (S.L.K. and R.J.W.). Each examination included a medical and dental history, extraoral, intraoral soft tissue examination, detailed examination of the dentition and periodontium and an occlusal assessment. Instrumentation was standardized and the dentition was examined with good illumination after isolating quadrants with cotton rolls and drying with air. Anterior teeth were examined with the aid of a transilluminator.* The examiner had only the bitewings and periapicals available during

this phase of the study. On the basis of the information gathered by examination with the aid of the bitewings and the requested periapical films, a diagnosis and treatment plan were developed.

At a later date (usually one week), the panoramic film was interpreted and all additional radiographic findings were noted. The films were viewed by the authors in an appropriately darkened room, using a standard viewbox, light-excluding frames and a 2.5 x magnification lens. Any additions or alterations to the diagnosis and treatment plan, which was previously established using solely the bitewings and periapical films, were then recorded.

RESULTS

The study group consisted of 54 patients, equally divided between males and females, with an average age of 19.8 years. On the basis of the clinical indications (HYCL), 171 periapical radiographs were taken. This amounted to an average of slightly more than three radiographs per patient. The most taken for any one individual was nine; for six patients *no additional periapicals* were taken. Table 1 displays the distribution of films taken for specific diagnostic criteria. Seventy-seven per cent of the periapical films were taken to discover the presence of and any abnormality associated with third molars; the radiographic

Table 1
Distribution of Periapical Films

Diagnostic criteria	Number of films	% of total number of films
Clinically absent tooth/clinically impacted tooth	139 (131 3rd molars)	81%
Pain related to teeth	9	5%
Temporary or extensive restorations	9	5%
Gross decay	5	3%
Fracture	4	2%
Colour change	2	2%
Miscellaneous	3	2%
Total	171	100%

*Novor, Demetron Research Corp., Danbury, Connecticut, USA

Table 2
Third Molar Radiographic Yield

Total films	Congenital absence or extracted	Potential impaction	Unerrupted normal development
131	26 (20%)	21 (16%)	84 (64%)

yield from these films is shown in Table 2. Excluding the third molar radiographs, an average of slightly less than one periapical radiograph per patient was required for all other reasons.

Findings from the Panoramic Film — The panoramic film was examined to determine if any occult condition was missed which would alter the treatment plan established by clinical examination, aided by specifically indicated periapical and bitewing radiographs. In only one patient did a finding from the screening panoramic film contribute an addition to the treatment plan. In this case, the tooth in question had a pulpotomy evident in the bitewing radiograph. Although there were no clinical symptoms, the panoramic film revealed a small well-defined periapical radiolucency.

In two other patients the panoramic film revealed occult conditions that did not require immediate treatment. One was resorption of the root of an endodontically treated incisor and the other a slight radiolucency about an over-extended silver point obturation. Other observations from the panoramic film were: root anomaly (two cases), dense bone island, an endodontic treatment with post, and a mucous retention cyst of the maxillary sinus.

In three patients the panoramic view provided more complete image coverage for malpositions and other abnormalities which were initially noted on the periapical or bitewing film.

DISCUSSION

Our use of screening films, whether complete mouth survey (CMS) or panoramic films or both, has been based primarily upon two considerations: (1) as a safety feature to protect against failure to find the hidden lesion and (2) to fulfil our role as part of the health team responsible not only for diagnosing and treating dental and oral disease, but also for identifying early signs of systemic disease. This is the premise on which we have based our almost universal prescription of routine radiographs.

While the odds against chance disclosure of occult dental disease are very long, the odds against chance disclosure of a life-threatening disease are prohibitive; for example, the prevalence of osteogenic sarcoma, the most common primary malignancy of bone.^{9,10} is 1:1,500,000. The cost in time, facilities and radiation to insure that every radiographically discernible lesion would be dis-

closed is so great that only unlimited resources and a "safe method" would justify such a medical service.¹ The same arguments apply to dentistry.

We selected the young healthy adult for study because this would seem to be *one* of the groups of patients where questions of doubt about the amount of information likely to be obtained from routine comprehensive radiographs are quite appropriate.

For the patients examined in this study, diagnostic criteria relating to third molars were responsible for the vast majority of periapical films taken, 131 films (77 per cent). The information from these films (Table 2) of 21 potential impactions represents a yield of 16 per cent. The bitewing radiographs taken as routine screening films for *new patients* disclose approximately 50 per cent more proximal lesions than clinical examination alone.^{1,5} Yields of this magnitude are exceptional in medical radiography and are ample justification for the radiation expended. The 40 remaining periapical films, which were taken for a variety of clinical indications, amounted to 23 per cent of the total; these exposures have direct effects on treatment management and unequivocally represent effective use of radiation.

One clinical/historical finding which was not included in our high yield criteria list was the presence, per se, of a root-filled or pulp-treated tooth. In retrospect this item provided the only additional, treatment-related information from the screening pantomographs. These films disclosed two small symptomless apical rarefactions and one case of root resorption. For one of the patients with an apical rarefaction, endodontic treatment was prescribed. If the mere presence of pulpal or root canal therapy had been a criterion for radiographic examination, then all of these apical changes would have been disclosed by prescribed periapical radiographs. This suggests that any criteria list should evolve with experience. Certainly for different age groups, the appropriate criteria will vary; for example, the signs and symptoms of destructive periodontitis would be a major item in the development of high yield criteria for the middle- and older-aged patient. There should be no thought of rigid adherence to these lists as they are simply guides to determining radiographic needs during initial examination. The final determinant of such needs will be the definitive clinical examination.

The use of high-yield criteria as the basis for prescription resulted in an average of only three periapical films per patient. If each patient in the study had a routine CMS (16 periapical films), a total of 864 periapicals would have been exposed, for a group radiation total of 224.64R (864 films x .26R**). Using selective radiography based on diagnostic criteria, the exposure from periapical films was 44.46R (171 films x .26R) — a potential reduction of 80

**The average ESE (entrance skin exposure) in the Division of Oral Radiology is .26R (260 mR) for one periapical. These exposures are measured with a Keithley Digital Dosimeter in air, 1" from the end of the extension tube.

per cent. Instead of a uniform 4.16R per patient (16 films x .26R) if a routine CMS had been prescribed, the actual periapical exposure for our patients varied from 0 to 2.34R. The mean number of periapical films was three for an average exposure of .78R per patient.

A common generalization seen in the literature rates the pantomographic exposure level at one-third that of a CMS. Although the substitution of this film for the CMS in a screening role represents a reduction in radiation to the patient, the lack of treatment-related information obtained by routine exposure of *all patients* in this study to such films is evidence of unproductive use of radiation. Although ineffective in a screening role, the pantomograph was useful in several instances because of its greater image context. This is the traditional role of the extraoral dental film, prescribed to obtain an entire image of a lesion which has been identified but not shown completely by the smaller periapical format.

The results of this study should help to allay the anxiety that we need complete, routine radiographic coverage to ensure that no disease is overlooked. We held the screening panoramic film in reserve to test whether clinical criteria were an adequate basis for a selective radiographic prescription. With the addition of one criterion, we can conclude that for the type of patient studied, the assumption was valid. In our young adult group, the positive information yield (especially related to third molars, Table 2) indicates that our criteria were pertinent and resulted in a productive use of radiation. The lack of information yield from our screening panoramic films for this group would support the contention that in the absence of clinical indications, such routine screening films are *not* an effective use of radiation. It seems much more practical in terms of radiation thrift and, in this study, safe in terms of diagnostic thoroughness, to limit the radiographic exposure to clinically indicated films. This in effect eliminates the use of either periapicals or pantomographs in a screening role.

CONCLUSIONS

In this study, reliance on clinical indications proved to be a safe, effective method of selecting radiographs appropriate to the patient's treatment needs. The high yield criteria list appears to expedite the process by providing selection guidance during an initial examination. With one exception, which in retrospect we believe should have been anticipated by the inclusion of a further item in our HYCL, the screening panoramic film provided no additional, treatment-related information. We are making a clear distinction here between radiographic findings that directly affect the patient's treatment and other information which, although interesting, is purely documentary. Careful analysis of purported "diagnostic information" from the study of large numbers of radiographs shows an overwhelming preponderance of the documentary type, e.g., osteosclerosis, calcified styloid ligament, etc.¹¹

The use of a process of selective radiography instead of screening surveys would have effected significant reductions in radiation for this population of young adults, without incurring risk from diagnostic omission. If the CMS had been our base-line screening, an exposure reduction of 80 per cent was possible. The elimination of the pantomography as a screening film would still result in a significant reduction of unproductive radiation.

For the patients of the kind selected for this study, the use of screening films does not appear to be a beneficial use of radiation and the practice should be discontinued. While we do not extrapolate our conclusions to the generality of patients, there are other subgroups where similar results from efficacy studies could be anticipated. For children and teen-age patients who are at greatest risk from the cumulative effects of radiation, such further studies should have high priority.

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May/mai

College of Dental Surgeons of British Columbia Convention, Hotel Vancouver, Vancouver, B.C., May 2-5, 1982. Contact: Venue West Executive Services Ltd., 1704 1200 Alberni Street, Vancouver, B.C. V6E 1A6.

Dental Corps Reunion, 35th Anniversary of "Royal Designation" Award to CDC, Sheraton Hotel, Toronto, Ontario, May 6-7, 1982. Contact: Major C.G. Hunt, 26 Southvale Drive, Markham, Ont. L3P 1J7. Open to all ranks having served with: Canadian Army Dental Corps, Canadian Dental Corps, Royal Canadian Dental Corps, Canadian Forces Dental Service.

Canadian Academy of Restorative Dentistry and Canadian Academy of Prosthodontists Annual Meeting, Park Plaza Hotel, Toronto, Ontario, May 7-8, 1982. Contact: Dr. Robert Echlin, 992 Birch-

wood Avenue, Burlington, Ont. L7T 2H8.

The Canadian Association of Orthodontists 1982 Annual Meeting and Scientific Sessions, The Sheraton Centre, Toronto, Ontario, May 7-10, 1982. Contact: Dr. Eric Luks, Convention Chairman, 5046 - 3080 Yonge Street, Toronto, Ont. M4V 2K6. Phone: (416) 481-4040 or Dr. Ray Bozek, Program Chairman, 7 - 2069 Gore Street, Burlington, Ont. L7R 1E2. Phone: (416) 639-6500.

The Academy of General Dentistry Presents Dr. Harold Nemets — "New and Basic Innovations in Crown & Bridge", Essex Room, Sheraton Centre, Toronto, Ontario, May 9, 1982. Contact: Dr. G. Gunther, 520 Buchanan Cresc., Ottawa, Ont. K1J 7X9.

Journées Dentaires du Québec, Queen Elizabeth Hotel, Montreal, Quebec, May 23-27, 1982. Contact: Dr. Morton R. Lang, Journées Dentaires du Québec, 3565 Berri Street, Suite 200, Montreal, Que. H6L 4G3. Tel. (514) 842-9112.

June/juin

Alberta Dental Association 1982 Convention (theme "Prosthodontic Patient of 1980's"), Westin Hotel, Edmonton, Alberta, June 9-12, 1982. Contact: Dr. A.

Bene or Mrs. F. Ingham, 4044 Dentistry Pharmacy Centre, University of Alberta, Edmonton, Alta. T6G 2N8.

XII Biennial Conference on Canadian Dental Education and Research and Meetings of the ACFD, Dalhousie University, Halifax, Nova Scotia, June 16-21, 1982. Contact: Kaireen Vaisson, Co-ordinator, Continuing Education in Dentistry, Faculty of Dentistry, Dalhousie University, Halifax, N.S. B3H 3J5. Phone: (902) 424-2248.

73rd Annual Conference of the Canadian Public Health Association, Explorer Hotel, Yellowknife, Northwest Territories, June 21-24, 1982. Deadline for submitting abstracts is December 31, 1981. For further details contact: Dr. David Martin, Chairman, Scientific Program Committee, c/o Canadian Public Health Association, 1335 Carling Ave., Suite 210, Ottawa, Ont. K1Z 8N8. Phone: (613) 725-3769.

July/juillet

The Sixth Congress of the International Association of Dentistry for the Handicapped, Harbour Castle Hilton Hotel, Toronto, Ontario, July 20-25, 1982. Contact: The Programme Chairman, Sixth Congress I.A.D.H., Dept. of Paedodon-

tics, Faculty of Dentistry, University of Toronto, 124 Edward St., Toronto, Ont. M5G 1G6.

The Pan-Pacific International Symposium on Biomaterials, University of British Columbia, Vancouver, British Columbia, July 28-30, 1982. Contact: Dr. R.H. Roydhouse, Secretariat Biomaterials '82, 1704, 1200 Alberni St., Vancouver, B.C. V6E 1A6.

August/août

Second International Congress on Hospital Dental Practice, Four Seasons Hotel, Toronto, Ontario, August 26-29, 1982. Contact: Dr. C.O. Munro, Programme Chairman, 2nd International Congress on Hospital Dental Practice, 124 Edward Street, Toronto, Ont. M5G 1G6.

October/octobre

The Fourth Biennial Symposium on Occlusal Studies, Hyatt Regency Hotel, Vancouver, British Columbia, October 17-20, 1982. Contact: The Society for Occlusal Studies, 1729 South Douglass Road, Anaheim, California 92806, U.S.A. or The Director, Division of Continuing Dental Education, 2199 Westbrook Mall, U.B.C., Vancouver, B.C. V6T 1Z7.

December/décembre

The Toronto Academy of Dentistry Annual Winter Clinic, Royal York Hotel, Toronto, Ontario, December 6, 1982. Contact: Academy of Dentistry, 234 St. George St., Toronto, Ont. M5R 2P2. Phone: (416) 967-5649. PLEASE NOTE CHANGE OF DAY AND DATE FROM PREVIOUS YEARS.

International

May/mai

Australian Dental Association, 23rd Dental Congress, Perth, Australia, May 2-7, 1982. Contact: Australian Dental Association, 23rd Dental Congress, P.O. Box 29, Parkville, Victoria, Australia, 3052.

The Dental Association of South Africa, Diamond Jubilee Congress, Durban, South Africa, May 10-14, 1982. Contact: Dr. Helmut Heydt, Executive Secretary, Dental Association of South Africa, Private Bay One, Houghton, 2041, South Africa.

XIth Annual Meeting of the European Academy of Gnathology, Convention Centre, Paris, May 19-22, 1982. Contact: XI^e Congrès de Gnathologie, P.M.V., B.P. 246, 92205 Neuilly-sur-Seine, France.

The International Congress of Oral Implantologists World Congress VI for Oral Implantology, Hyatt Regency Hotel, Maui, Hawaii, May 21-23, 1982. Contact: Mr. Clifford J. Kirschner, Executive Director, The International Congress of Oral Implantologists, P.O. Box 2277, Grand Central Station, New York, N.Y. 10163, U.S.A.

June/juin

The 1982 Annual & Scientific Meeting of the British Dental Association, Metropole Hotel, Brighton, England, June 2-5, 1982. Contact: British Dental Association, 64 Wimpole Street, London W1M 8AL, England.

Holistic Dental Association Conference, Doubletree Inn, Houston, Texas, June 3-6, 1982. Contact: Dr. Hershall A. Allan, Program Chairman, Holistic Dental Association, 6550 Tarnef, Suite 15, Houston, Texas 77074, U.S.A.

The 88th Annual Meeting of the American Dental Society of Europe, Park Hotel, Sandefjord, Norway. June 28-July 2, 1982. Contact: Hon. Sec. Dr. Brian J. Parkins, 57 Portland Place, London W1N 3AH, England.

July/juillet

Academy of General Dentistry's 30th Annual Meeting, The Sheraton-Boston Convention Complex, Boston, Mass., July 10-14, 1982. Contact: AGD, 211 E. Chicago Ave., Suite 1200, Chicago, IL 60611, U.S.A.

The New Zealand Dental Association's 11th Biennial Conference, Rotorua, New Zealand, July 17-23, 1982. Contact: New Zealand Dental Association, 238 Remuera Road, P.O. Box 28 084, Auckland 5, New Zealand.

October/octobre

Third International Dental Congress on Modern Pain Control, Tokyo, Japan, October 3-6, 1982. Contact: Third International Dental Congress on Modern Pain Control, c/o Japan Convention Services Inc., Nippon Press Center Building, 2-1, Uchisaiwai-cho 2-chome, Chiyoda-ku, Tokyo 100, Japan.

Fédération Dentaire Internationale, 70th Annual World Dental Congress, Vienna, Austria, October 11-16, 1982.

1983 +

Canadian Dental Association, 1983 National Convention, Vancouver, British Columbia, August 25-28, 1983.

Fédération Dentaire Internationale, 71st Annual World Dental Congress, Tokyo, Japan, November 14-20, 1983. Contact: Japan Dental Association, 1-20, Kudan-Kita 4-chome, Chiyoda-ku, Tokyo 102, Japan.

Canadian Dental Association, 1984 National Convention, Montreal, Quebec.

Fédération Dentaire Internationale, 72nd Annual World Dental Congress, Helsinki, Finland, August-September, 1984.

Canadian Dental Association, 1985 National Convention, Ottawa, Ontario, September 29-October 2, 1985.

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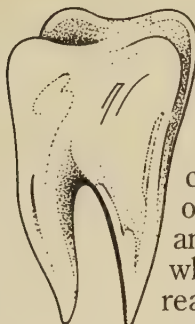


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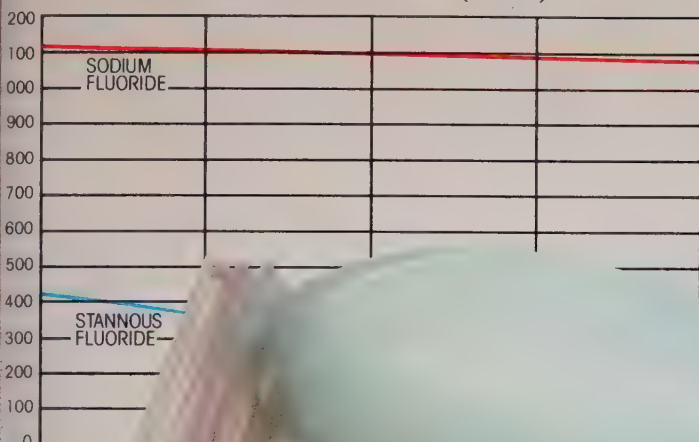
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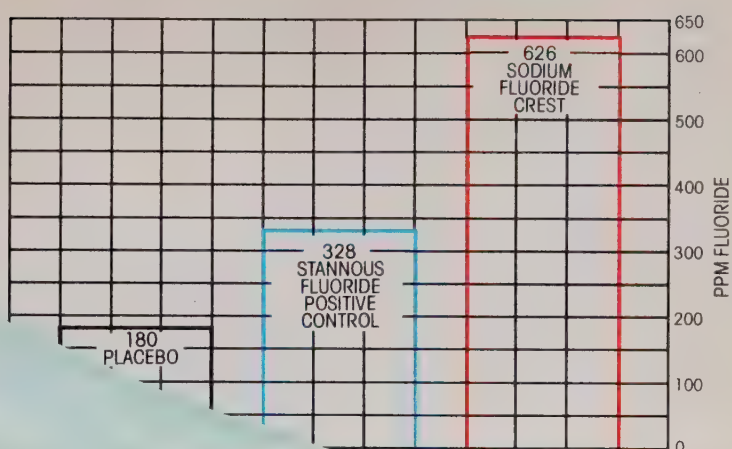
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References

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Similar names of associations, some recognized, some not, can be confusing to the public and perhaps even to the members of the dental profession.

Advocates "Dental Milk"

Milk premixed with fluoride, being produced in Britain, is touted as being superior to the practise of adding fluoride to the drinking water supply.

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— W.B. Donohue

Pain and Anxiety Control in Dentistry

"This textbook should not be mistaken for the original publication "Amnesia-Analgesia Techniques in Dentistry" by the same author. This endeavour is far more comprehensive." — David Donaldson

- 324** **Dental Treatment Planning for the Adult Patient**

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"This excellent little volume represents the third edition of a book which only made its first appearance seven years ago. It has been updated because of the large amount of new information that has become available in the field."
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- 325** **Pharmacology and Therapeutics for Dentistry**
"Written by 27 contributors, this book provides the dentist with a thorough understanding of the principles of drug action and of the pharmacology of all the major classes of drugs."
— Dr. B.G. Benfey

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Journal

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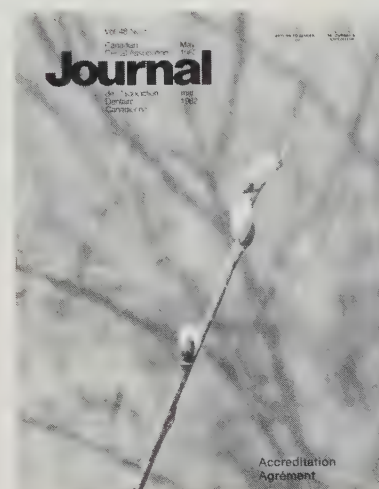
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Articles and editorials are fostering an increased awareness among consumers and in the profession. Requests for a closer scrutiny, not only of the process but of the product — in our case dentists — going out into a changing and complex societal matrix is in order.

Peer evaluation in Canadian dentistry is sponsored by the profession. The CDA is tasked with ensuring the maintenance of standards of excellence in the educational institutions. To do this the support and confidence of the profession, the licensing bodies and the institutions are required.

Currently the Canadian Dental Association conducts accreditation surveys, including site visits, to each dental school based on a five year cycle. Dentists are licensed by Provincial Dental Boards upon presentation of a National Dental Examining Board of Canada certificate. Until 1971 candidates were required to pass a comprehensive written examination administered by the NDEB. In 1971 the NDEB began granting certificates to graduates of approved programs without further examination. In fact, licensing remains the responsibility of the provinces but is based on NDEB acceptance of the University degree from a CDA approved program as indication of the graduate's competence.

Since the first Committee was established to examine and report on the dental schools in Canada, in 1950, the accreditation process has undergone a long evolutionary development. The increasing complexity of professional practice necessitated periodic revision of accreditation standards. Survey Team membership has been increased to provide functional involvement in the institutional visits. For many years the team consisted of three members. More recently this was expanded to involve a member of the licensing body associated with the provincial institution being surveyed. This year the National Dental

Examining Board representative became a full member and will now be more able to fully evaluate the process for which that Board grants certificates.

The Team is now structured to contain the required expertise to evaluate the training which the undergraduate receives prior to graduation and provides an in-depth view of the whole of the process. But this is only one aspect of quality assurance. In an effort to further refine the techniques, methods of evaluating the clinical training the student receives are being developed by the Council on Education. This year two institutional surveys were lengthened and incorporated a review of the clinical training being received by all undergraduate years. Clinicians visited laboratories and spent time with the clinical disciplines. Two different formats were used and, while final reports are not yet available, it seems apparent that a good overview of the process involved in teaching the clinical aspect is possible, as well as some insight into the competency attained at each year of training.

While clinical competency is very carefully evaluated by the institution over four years of undergraduate training, some will argue that a provincial board examination is still required to ensure competency. Still others will argue that the clinical exam route is not only very expensive and, while it is the only reliable method for evaluating global candidates, it has less pertinence and value on the smaller Canadian scene.

If dentistry's goal is to protect the oral health of the patient, two problems present themselves: can we be sure the student has the current "state of the art" on graduation and, secondly, assurance that competency is maintained over the life of the practice. No health profession has addressed the second in a meaningful way yet. It is our contention that the former can be best addressed with closely monitored student contact over a four year curriculum that meets current guidelines developed by the voluntary professional body.

*Dr. J.V.P. Chatwin
Director of Accreditation
Canadian Dental Association*

LA QUALITÉ PROFESSIONNELLE

L'application du programme d'agrément à l'enseignement de la médecine dentaire au Canada a pour objet principal d'en évaluer les "méthodes". Depuis quelques années, on a cependant tendance à mettre l'accent sur l'évaluation du "résultat", c'est-à-dire le dentiste, pendant et après sa formation.

Alors que les médias appellent, par leurs articles et leurs éditoriaux, consommateurs et membres de la profession à une plus grande prise de conscience, il convient d'examiner la question minutieusement, non seulement les méthodes mais aussi le résultat, les dentistes appelés à servir une société complexe et en constante évolution.

Au Canada, c'est la profession dentaire elle-même qui parraine le recours au jugement des pairs, en demandant à l'Association dentaire canadienne de veiller à maintenir des normes d'excellence dans les institutions d'enseignement. L'organisme ne saurait le faire sans l'appui et sans la confiance de la profession, des organismes de réglementation et des institutions.

Actuellement, l'Association fait une inspection quinquennale de toutes les facultés de médecine dentaire, y compris la visite des lieux. Les dentistes reçoivent leur licence d'une commission provinciale, sur présentation d'un certificat du Bureau national d'examen en médecine dentaire. Jusqu'en 1971, celui-ci faisait passer un examen écrit complet à tous les candidats, mais depuis, il accorde le certificat sans examen aux diplômés qui ont suivi un programme agréé d'enseignement. De fait, la délivrance des permis incombe aux provinces qui, pour juger de la compétence du diplômé, s'en remettent à la décision du Bureau national d'examen d'accepter le diplôme d'une université dont le programme de formation a été agréé par l'Association.

Les procédures d'agrément ont grandement évolué depuis la création, en 1950, du premier comité chargé d'inspecter les facultés de médecine dentaire du Canada. Les normes ont dû être révisées périodiquement au fur et à mesure que la pratique de la profession se faisait plus complexe. On a grossi l'équipe des examinateurs pour la rendre plus fonctionnelle lors de la visite des institutions. Pendant longtemps, elle n'a compris que trois membres, puis on y a ajouté récemment un représentant de l'organisme de réglementation en rapport avec l'institution provinciale visitée. Et cette année, on y a ajouté un représentant du Bureau national d'examen en médecine dentaire,

qui sera en mesure d'évaluer pleinement tout le processus d'enseignement qui permet à son organisme d'émettre ses certificats.

Sa structure permet maintenant à l'équipe d'avoir les compétences requises pour évaluer la formation que reçoivent les étudiants du premier cycle et de présenter une vue en profondeur de tout le processus, mais cela ne représente qu'un aspect des mesures à prendre pour garantir la qualité professionnelle.

Pour perfectionner davantage le système, le Conseil de l'éducation est à mettre au point des méthodes pour évaluer la formation clinique des étudiants. On a prolongé, cette année, l'inspection de deux institutions en y ajoutant une revue de la formation clinique donnée à tous les étudiants, y compris la visite des laboratoires par des cliniciens et l'observation de l'exercice des diverses disciplines en clinique. On a utilisé deux méthodes différentes et, même si on n'en a pas encore le rapport final, il semble qu'on puisse obtenir une bonne vue d'ensemble du processus d'enseignement clinique, de même que connaître dans une certaine mesure la compétence acquise après chaque année de formation.

Certains diront qu'il faut toujours faire passer l'examen de la commission provinciale pour s'assurer de la compétence des candidats, même si les institutions évaluent avec grand soin leur compétence clinique pendant les quatre années. D'autres diront que l'examen clinique est non seulement très coûteux mais aussi moins pertinent et moins valable à l'échelle du pays, alors que c'est la seule méthode fiable dont on dispose pour évaluer les candidats venant de l'extérieur.

Si la médecine dentaire a pour objectif de protéger la santé buccale du patient, il faut se poser deux questions: d'abord, comment s'assurer que le nouveau diplômé possède toutes les connaissances voulues au moment de la collation des grades; ensuite, comment s'assurer qu'il restera compétent pendant toutes ses années de pratique. Aucune profession de la santé n'a encore abordé vraiment la deuxième question. Quant à la première, nous croyons que la meilleure façon d'y répondre, c'est de suivre de près, pendant ses quatre années d'études, l'étudiant qui suit un programme conforme aux lignes directrices formulées par un organisme professionnel et bénévole.

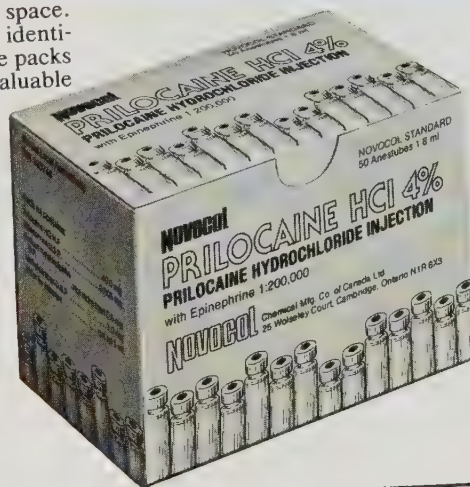
*Dr J. V. P. Chatwin
Directeur de l'Agrément
Association dentaire canadienne*

6

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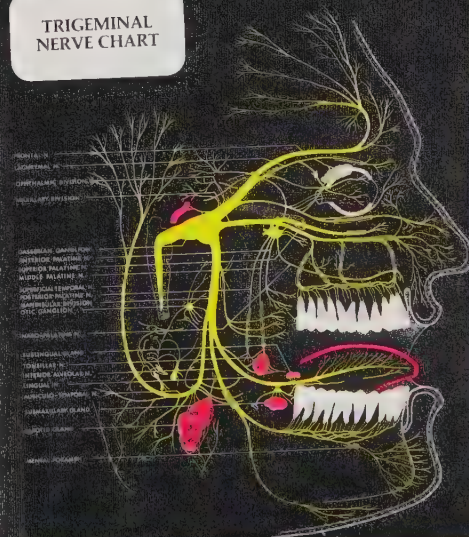
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WELDEN E. BELL, D.D.S., Clinical Professor of Oral Surgery at University of Texas Southwestern Medical School in Dallas.

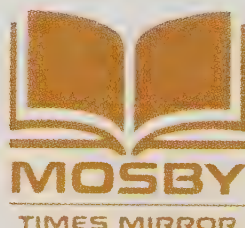
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Edited by R. HASKELL, MRCP, FDS. 416 pages, 200 illustrations. Book code 4234-5. Tent. Price \$48.00. Due Fall, 1982.

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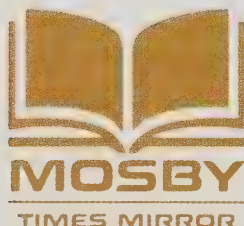
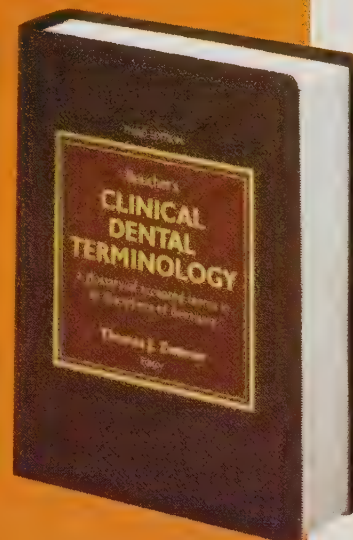
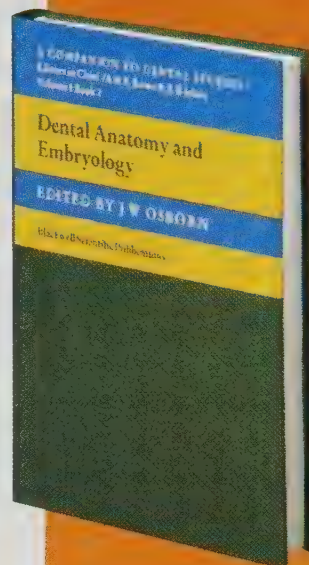
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The book is a glossary of dental terminology in all areas of dentistry. It has been completely revised and updated. A total of 1162 new or revised definitions are included and 1145 obsolete definitions have been deleted. In order to make the book more relevant to current dental practice, terms have been added in the behavioral sciences and practice administration, including law, statistics, computer science, quality assurance and TSRO (Peer review) and insurance.

Book code 0712-4. Price \$35.00. Due April 1982.



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Misleading credentials

I am writing to the Journal with regards to two articles which were printed in the January 1982 issue. The first was a letter written by Dr. Ralph Brooke, the University of Western Ontario, entitled "The Quacks Within Our Profession". The second article was on the following page and was entitled "Dr. . . . Recognized by International Group".

Dr. Brooke's article contained several challenging statements. I believe that he is correct in noting that the Medical Profession has been more attuned to closely scrutinizing those individuals who are practising on the "fringes" of the profession, both in terms of their ethics, and their techniques of treatment. I think that it is somewhat ironic that the same issue which contained Dr. Brooke's letter also contained an article which can, at best, be said to be misleading. Indeed it would be quite easy to draw completely inaccurate conclusions from the article about the general practitioner from Vancouver.

I'm certain that the public is misled (perhaps even members of the dental profession?) by such names and titles as: "International Association of Orthodontics" and "diplomat from the International Board of Orthodontics". The similarity between the aforementioned names and the recognized associations whose members are Certified Specialists in Orthodontics (The American Association of Orthodontists, The American Board of Orthodontics) is no doubt by design, rather than by accident. The resulting confusion is therefore by design.

There is absolutely no reason that any general practitioner cannot practise any aspect of dentistry that he/she feels that he/she is qualified to do. Many of us attend various "study groups" to learn more about certain aspects of our profession. Indeed it is this quest for new knowledge which stimulates us to deliver better and bet-

ter care for our patients. "Learning" and implementing this new knowledge is challenging and fun; and it is of benefit to our patients. There is nothing to be gained by presenting either ourselves, or our techniques, as something which we/they are not. Why then is it necessary to parallel well-known, and accepted associations such as the American Association of Orthodontists which carries a certain guarantee of advanced training and knowledge with its membership with "home-made" organizations such as the International Association of Orthodontics which carries no such guarantees as to its members' training and expertise.

I have no doubt that our patients are easily confused by all these similar terms, titles and organizations. There is no need for "duping" the public (and confusing members of the profession?) because they deserve the plain truth and the best service that you can offer, no matter what your training or qualifications.

*Dr. Robert H. Cram
Red Deer, Alberta*

Advocates "Dental Milk"

The decision of Waterloo city voters to continue a "14-year-old practice of adding fluoride to the water supply" was favoured by so small a majority that one cannot help wondering whether your Journal still represents the views of the majority of Canadian dentists.

In the hope that your columns might be opened to progress I am hopefully sending you once again particulars of a method which is go-ahead and is receiving considerable attention in eight countries for the benefit of the rising generation.

Briefly: a daily drink of 200 ml. of milk premixed with 1 mg. of fluoride is given to schoolchildren in heat-sealed cartons supplied with a straw, which are then thrown away. The whole operation is carried out with minimum disturbance to the curricu-

lum. In places where milk is not customary nor easy to obtain (though long-keep can be used for six months) citrus fruit juice can be substituted. This does not give the additional benefit of protein, calcium and vitamins, which are the milk's content.

Most recently this method has been taken up by the Louisiana State University involving 1,000 New Orleans schoolchildren under supervision by an advisory committee of 11 scientists and technicians from a wide range of disciplines. In the U.K. a five-year trial has just ended which has produced very satisfactory results.

The Borrow Dental Milk Foundation, whose method — known as 'Denta-milk' — is being used, is an endowed charity founded by Mr. E.W. Borrow for the sole purpose of resolving this stubborn problem which is essentially children's because it is during the development of the teeth that the fluoride can be effective; after 14 years of age its usefulness ceases. A mixing and packaging plant, the first in the world to produce fluoridized milk, has been installed by Dairy Health Products (Cowplain) Ltd.

*Phillis Deakin
Waterlooville,
Hants., England*

Praise for article

I would like to congratulate Dr. W.R. Bedford for his excellent article in the February issue of the Canadian Dental Journal.

The article is imaginative, factual and complete. It tells it like it is, and can very well be adopted as a manual for every dentist who is going to participate in the delivery of dental services to Native people in Canada.

In Alberta we have 47 confirmed volunteers in our manpower pool, and I can assure you that they will be encouraged to use Dr. Bedford's article as part of their mandatory kit before they leave home.

*L.G. Mandin, D.D.S., F.I.C.D.
A.D.A. Liaison Native Treatment
Services for Alberta.*

In the News

All Undergraduate Programs Now Accredited by CDA



The noon-hour voluntary open forum with the student body provides students with an opportunity to meet with the Dean and discuss problems as they see them. Addressing the forum is CDA Director of Accreditation Dr. J.V.P. Chatwin.

Canadian dental schools have made steady forward strides over the past three decades with all 10 now featuring undergraduate programs accredited by the Canadian Dental Association.

Since the CDA first surveyed the nation's dental schools back in 1950, the accreditation process has expanded to include specialty programs and also dental auxiliary programs in

both universities and community colleges.

Accreditation gives potential students assurance that the approved institution's program compares favourably with those of other schools and that its standard of instruction meets or exceeds standards considered by the CDA to be necessary for proper training.

An added bonus for students is that

since 1971, the National Dental Examining Board (NDEB) has granted its certificate without further examination to graduates of undergraduate dental programs having CDA accreditation status. There is also a reciprocal agreement between the CDA and the American Dental Association which makes a graduate of a CDA-accredited dental school acceptable for graduate/postgraduate

training at an accredited American college.

In addition to the preparation of guidelines for approval of undergraduate programs, other guidelines have been drawn up by the Council on Education and approved by the Board of Governors for nine specialty areas. These include orthodontics, paedodontics, oral pathology, oral surgery, periodontics, endodontics, oral radiology and public health.

Canadian universities have accredited programs for all but public health, oral radiology and endodontics.

The latest in a continual updating of accreditation guidelines was completed during the 1980-81 academic year. The Handbook on Evaluation Procedures was updated at the same time and the Board of Governors, at its meeting in Calgary, approved revised accreditation classifications.

Eleven accreditation surveys (two undergraduate programs, six special-

ty programs and three auxiliary programs) were done during the 1981-82 term. Full approval, when granted, is valid for a five-year period.

Accreditation is an entirely voluntary process which must be initiated through a request by the interested institution to the CDA for a site visit. The school has the right to approve the choice of surveyors.

In a determined effort to ensure that conclusions reached by surveyors are sound and totally unbiased, a number of significant changes regarding the composition of survey teams have been made in recent years.

The small number of Canadian specialty programs and the fact that many specialists knew or were associated with each other and/or the institution to be visited made it difficult to find people suitable for team membership during the early years of specialty program surveys. Consequently, American specialists acted as team members for a number of years.

Although there remains a difficulty in at least one specialty, most are now free of the problem and requests are made by the CDA to specialty associations for suggested names of surveyors.

Regulations set out by the Board of Governors stipulate that the surveyor must have had no previous association with the institution being surveyed. This, coupled with the fact that the school approves the surveyor, safeguards the right of each school to a fair appraisal.

A further expansion has been the inclusion of a member of the provincial licensing bodies on survey teams. The first move in this direction was the inclusion of a registrar observer in 1978.

Also included on the survey team for an undergraduate survey is a representative from the National Dental Examining Board. And since July of 1978, Dr. J.V.P. Chatwin has been the CDA's first permanent director of accreditation.



On a recent accreditation visit to the University of Alberta the accreditation team visited with Dean Gordon Thompson. Seated left to right are Dr. Robert Kinniburgh, president-elect of the Alberta Dental Association and representative of the Alberta licensing body; Dr. J.V.P. Chatwin, director of accreditation for CDA; Dr. Pierre Desautels of the University of Montreal; Dr. Charles Dowse, a basic scientist from the University of Manitoba; Dr. Donald Gordon, representing the NDEB from Chester, Nova Scotia; and Dean Gordon Thompson.

Toronto to Host 6th Congress of Dentistry for the Handicapped

The 6th Congress of the International Association of Dentistry for the Handicapped will take place in Toronto at the Harbour Castle Hilton Hotel from July 20-25, 1982.

The scientific program committee has compiled a formidable schedule of speakers and topics that will offer many benefits for health professionals concerned with dentistry and the handicapped.

Featured internationally renowned speakers will include Pal Toth of Hungary, Peter Westphal of Sweden, Roger Hall of Australia and Saul Kamen of the United States.

Keynote Canadian speakers have carefully been chosen from fields outside dentistry. Abbyann Lynch, a University of Toronto Professor of Philosophy, will speak on the rights of the disabled; Sydney Dinsdale, a Children's Hospital of Eastern Ontario Physiatrist, will discuss rehabilitation medicine; and Alexander Lowden of the Hospital for Sick Children of Toronto will shed light on genetic metabolic diseases.

Presentations by outstanding clinicians from Scandinavia, United States, Japan, United Kingdom and Canada have also been arranged. There will be table clinics, movies, poster displays and video sessions from Israel, Denmark, Switzerland and other lands.

Some dental topics which will be included in the Sixth Congress are geriatric dentistry, dental hygiene and its aids, feeding problems as related to dentistry, acid etch prostheses, and over-dentures.

The medicine and management items of interest include epilepsy and new drug therapies, dyskinesia, pre-medication procedures and operating room facilities, haemopathology, and cervical spine injured patients.

There will also be discussion of dental care to homebound patients,

mobile dental clinics, integration of handicapped patients into private dental practices and special equipment.

The registration fee of \$250 (Canadian) includes a welcome reception, all coffee, juice and fruit breaks, lunches, a visit to Toronto's famous C.N. Tower and the gala banquet and

ball. There are other events and activities available for both registrants and accompanying persons.

For more information, contact the Registration Chairman, Sixth Congress I.A.D.H., Dept. of Paedodontics, Faculty of Dentistry, University of Toronto, 124 Edward Street, Toronto, Ontario, Canada M5G 1G6.

Obituaries



1981 Convention Chairman Headley

HEADLEY, Randolph, Hugo, March 9, 1982. Dr. Headley of Calgary, Alberta was born in 1923 and graduated from McGill University in 1956. He had a distinguished career in the Canadian Armed Forces from 1944 to 1975, practising with both the Canadian Signals Corps and Canadian Dental Corps. From 1975 to 1982 he practised in Calgary, Alberta. He was chairman of the CDA Calgary Convention in 1981.

MCLACHLAN, Howard (Scotty) Thorold. Dr. McLachlan, 86, of Toronto, Ontario graduated from the University of Toronto in 1923. He practised dentistry in Port Dover and Simcoe, Ontario before setting up practice in Toronto. He served with the Royal Canadian Dental Corps during World War II, continuing this work with the Department of Veterans Affairs after returning from overseas in 1943.

SCIAKY, Ino. Prof. Ino Sciaky, regarded as the father of dental education in Israel, died February 9, 1982. One of the founders of the Hebrew University-Hadassah School of Dental Medicine, Prof. Sciaky was an advisor on dental health to the Israeli Ministry of Health. He was also a member of the World Health Organization's advisory panel on oral health and Chairman of the Commission of Dental Education in the Fédération Dentaire Internationale.

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Nitrous oxide gas, commonly referred to as "laughing gas" when used for entertainment purposes in the early 19th century, is no laughing matter these days.

Nitrous oxide, a gaseous anaesthetic used by the medical and dental professions for nearly a century, has been the object of recent studies. Although its suitability and safety as a medical and dental therapeutic have not been questioned, some environmental and occupational concerns have arisen.

Health and Welfare Canada, in its Alert Letter No. 46 to dentists, dated February 15, 1982, emphasized that chronic exposure to nitrous oxide may pose significant hazards to the dental staff.

This Alert Letter was the second document in as many months from the Bureau of Medical Devices which dealt with environmental matters in health care. An earlier Letter, issued on January 8, alluded to carcinogenic risks from ethylene oxide. This gas is a common sterilant with limited usefulness in the dental operatory.

The documents underline that, surprising as it may appear, the Bureau of Medical Devices is part of the Directorate of Environmental Health and functions separately from other bureaus who have responsibility for enforcing safety and efficacy of therapeutics such as drugs and biologics at the federal level.

When investigating the issue of nitrous oxide gas and its use by dentists, the American Dental Association found that chronic exposure to nitrous oxide may pose significant hazards to the dental staff. Health problems may range from liver disease

and neurological disorders to complications in pregnancy.

The results of a survey published in the July 1980 issue of the American Dental Association Journal found that "long-term (and repeated occupational) exposure to trace anesthetics in the dental operatory can be associated with increased general health problems."

Studies and independent research carried out on behalf of Health and Welfare Canada's Bureau of Medical Devices show that nitrous oxide poses greater risk for dental staff than for medical personnel.

In absolute quantities, hospitals use "a lot more" nitrous oxide gas than dentists, Dr. A.K. DasGupta, the Bureau's director, said. But dentists tend to "use the gas almost exclusively whereas hospitals rely on more than one type of anaesthetic," Dr. David Johnson of the Bureau added.

Dr. Johnson, a physicist responsible for gathering technical data on medical and dental anaesthesiology equipment, indicated that the Bureau "had become aware of the dangers incurred by exposure to nitrous oxide some time ago but was initially more concerned with exposures in surgical examining rooms (of hospitals)." He admitted it wasn't until the Bureau was approached by several dentists that it decided to take a closer look at exposures in dentists' offices.

Subsequent surveys suggested that "the effects of exposure to nitrous oxide on the dental staff was more clear-cut" because dentists rarely use other types of anaesthetics, Dr. Johnson said. In addition, many dentists do not use as much of the gas as hospitals and are therefore less inclined to install costly devices which can reduce the ambient gas level.

"When you use a lot of nitrous oxide you take precautions. When you use very little you don't," Dr. DasGupta explained.

The Alert Letter, undersigned by A.J. Liston, Acting Deputy Minister, was sent to dentists across the country. It warned about high nitrous oxide levels from dental anaesthe-

tic machines.

The special bulletin recommended the use of gas scavenging devices, installation of proper ventilation systems, minimization of conversation with the patient during treatment (a patient who inhales the gas will also exhale it), improvements in the general ventilation of the surgery, and regular inspections of the nitrous oxide administration equipment.

These recommendations resulted from a preliminary study completed over the last 18 months at the University of British Columbia by Dr. David Donaldson, Associate Professor of Restorative Dentistry.

The study's objective was to determine which of the four gas scavenging devices now presently on the Canadian market are capable of reducing nitrous oxide levels to below the U.S. Institute for Occupational Safety and Health's recommended level of 50 parts per million. The work was performed under contract from the Bureau of Medical Devices.

Although observable differences in efficiency were noted between the machines, Dr. Johnson said each machine appeared to reduce the gas level to an acceptable low concentration when the ideal operating conditions were reached for each machine.

According to Dr. Johnson, the machines generally do what the manufacturers claim.

Future investigations into gas scavenging devices and their effectiveness in reducing nitrous oxide levels "depends on the priority or urgency" dentists place on the problem, Dr. Johnson stressed.

Dr. DasGupta said the Alert Letter was intended as an advisory, not a regulatory, document. He hopes dentists who read the letter will be motivated to install proper gas scavenging equipment in their offices. Even an inefficient machine "is better than nothing," he said.

According to Dr. Johnson, only "a small fraction" of the Canadian dentists who consistently use nitrous oxide machines have gas scavenging devices.

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Conference on Oral Pathology Teaching



Delegates to the teaching conference in the CDA Building board room in Ottawa on April 16, posed outside in the welcome spring sunshine. They are, left to right, front row: Dr. C.L.B. Lavelle, University of Manitoba; Dr. Martin T. Tyler, McGill University; Dr. Barbara B. Harsanyi, Dalhousie University; Dr. C. Mascrès, Université de Montréal; Dr. H.M. Dick, University of Alberta and Dr. Vlastimil Bazant, University of Saskatchewan. Second row, left to right: Dr. David S. Gardner, University of Western Ontario; Dr. John D. Spouge, University of British Columbia; Dr. J.H.P. Main, University of Toronto; Dr. W.T. McGaw, University of Alberta and Dr. R.J. McComb, University of Toronto. Back row, left to right: Dr. Rénaud R. Morency, Université Laval; Dr. R.M. Courtney, University of Michigan, guest delegate; Dr. Thomas McCrory, McGill University; conference chairman Dr. David Mock, University of Toronto, and Dr. J.S. Ahing, University of Manitoba.

At a day-long teaching conference on teaching of oral pathology in the undergraduate dental curriculum, held in the CDA building in Ottawa on April 16, guest resource person, Dr. R.M. Courtney, Chairman and Professor of Oral Pathology, University of Michigan, stressed the need to examine teaching methodology and to place oral pathology in its proper perspective within the curriculum.

Dr. David Mock, faculty of dentistry, University of Toronto and secretary-treasurer of the Canadian Academy of Oral Pathology, chaired the conference, co-sponsored by the CDA and the ACFD.

It was hoped that the results of the conference would assist in determining pathology curricula, within the "blueprint for accreditation" that

the CDA is working to establish, Dr. Mock said.

One of the major problems of faculty members in dental schools is "that most of us are not professionally-trained teachers," Dr. Courtney said. He hoped that the conference would provide some answers about how to develop successful teaching methodologies, "primarily to undergraduate students."

He said lecturers tend to emulate the style of "our mentors. I think we ought to experiment a little. Look around and try to find a system we're comfortable with. Something we can be enthusiastic about. If you are bored, they're (the students) bored."

Dr. Courtney also believed that great care must be taken in placing oral pathology into the curriculum at

the right stage so that the subject can gain the proper attention of students and not be lost amid the competition from other subjects.

Delegates included Dr. S. Ahing and Dr. C.L.B. Lavelle, of Manitoba; Dr. Vlastimil Bazant, University of Saskatchewan; Dr. H.M. Dick and Dr. W.T. McGaw, University of Alberta; Dr. D.G. Gardner, University of Western Ontario; Dr. Barbara B. Harsanyi, Dalhousie University; Dr. J.H.P. Main and Dr. R.J. McComb, University of Toronto; Dr. C. Mascrès, University of Montreal; Dr. Thomas P. McCrory and Dr. Martin T. Tyler, McGill University; Dr. J.D. Spouge, University of British Columbia and Dr. Rénaud R. Morency, Université Laval.

Sharing Office Costs

Rising overhead costs are causing dentists to consider innovative methods of keeping practice expenses under control.

One recommended approach is for the "solo" practitioner to consider some form of sharing office overhead with one or more colleagues. Two examples are offered.

Limited Sharing

This involves dentists having separate operatories within the same practice but sharing a variety of services. These can comprise a waiting room, office laboratory, staff room, private office, etc.

While most of us like to have our own private or business office, I have observed in visiting a wide variety of practices, that busy dentists rarely use their private office. On the other hand, I am familiar with one group practice in which several dentists have their own office desk, files and chair — in the same room — which is a little reminiscent of the news room in a newspaper office. This space saving configuration works well.

Staff can be shared and their salaries spread around more than one dentist. A good receptionist should be able to look after the appointments and fee collection of two dentists. It is not too difficult to share the cost of an additional assistant and have her work either totally in the operatory, the office laboratory or the reception desk or some combination of all three. In the same general way, a hygienist, secretary, or bookkeeper can be shared.

Money can also be saved by bulk buying dental materials but gains in discount for purchasing double quantities of materials can be offset by most dentists' strong views on what

materials they are prepared to use and not use.

If, however, agreement can be made with a colleague about using the same materials, then lowered costs to each can be reasonably expected. Even if agreement is not substantially achieved, the labour costs involved in inventory control can be shared.

This kind of sharing does not interfere with one's control over treatment plans or fee schedules. It does have the additional advantage that if one dentist is temporarily sick, the colleague(s) will presumably be willing to look after his patients' emergencies and to legally supervise his own or shared hygienist.

Extensive Sharing

The ultimate form of sharing is for two dentists to run completely separate practices out of the same operatories.

The usual arrangement is for one dentist plus his complete staff (including receptionist) to work Monday through Wednesday and the second dentist plus staff to work Thursday through Saturday. At the end of every

month, each dental crew rotates from working the first half of the week to the second and vice versa in order to share access to weekends.

The principal financial saving in this arrangement centres round the office rent, utilities and dental equipment costs. The opportunity for savings on the cost of materials also applies to dentists in extensive sharing.

The office personnel I know who work this arrangement say they would never return to working a five-day week. With four days off each and every week, they say working 30 to 36 hours over three full days is no problem at all.

They also say they are much more productive per hour under this arrangement than on a five-day week basis. A major non-financial benefit in extensive sharing is the opportunity to do things in one's private life that four free days per week creates. As in limited sharing, reciprocal cooperation with one's colleague makes possible emergency cover for patients when not on duty.

by Dr. A.E. MacLeod
Chairman, Editorial Board

CDA Retirement Savings Plan

Unit values of the Canadian Dental Association's Retirement Savings Plan stood as follows on March 31, 1982.

<i>Common Stock Fund</i>	\$48.2710
<i>Fixed Income Fund</i>	\$27.1051
<i>Guaranteed Fund</i>	\$22.7908
<i>Balanced Fund</i>	\$11.0596

Total assets (market value) of the plan were \$29,963,929.

The previous month's figures, as of February 28, 1982, stood as follows:

<i>Common Stock Fund</i>	\$48.9979
<i>Fixed Income Fund</i>	\$26.6661
<i>Guaranteed Fund</i>	\$22.5200
<i>Balanced Fund</i>	\$11.4066

Total assets (market value) of the plan were \$30,363,510.00

For further information write to: Canadian Dental Service Plans Inc., 2 St. Clair Ave. E., Toronto, Ont. M4T 2W1 or call the central information services of CDSPI At 1-800-268-3792 (961-7117 in Metro Toronto).

Financial Indicators in Practice

Since 1978, overhead costs in private practice have increased at an alarming rate.

First class law firms around the country are experiencing the same problems as dentists in providing quality service to clients while overhead costs are soaring.

One approach I recommend for coping with this problem in dentistry is to maintain up-to-date information on the financial side of a practice — especially the early identification of trends.

Monthly Monitoring System

The purpose of the monitoring system is to create a framework of information which helps see the direction a practice is moving on a monthly and year-to-year basis. Income should be identified from a variety of sources, including dentist (s), hygienist (s), restorative, prosthetic, preventive, and surgery.

Operational expenses should exclude fixed costs like start-up expenses and loan payments. They should detail expenses which are prone to change, such as salaries, rent, materials, and laboratory charges. I suggest the period summarized be each and every month.

Aging Report

This is simply a list of delinquent patients and the amount each owes, culled from the patients' ledger card file by the receptionist.

The dentist examines this list each month and makes his decision on each delinquent account for subsequent action by his receptionist, bookkeeper, lawyer or collection agency. One method I have found successful is to have the receptionist make a phone call to each delinquent requesting payment by a definite date, warning that the debt will be handed over for

collection to lawyers if payment is not forthcoming.

Average Hourly Income

Until quite recently the idea of calculating one's professional income by the hour would have struck many dentists as offensive.

But if we are going to stand a chance of keeping our heads safely above water in the future, then scrutinizing our average hourly income on a regular basis is one of the things I think we are going to have to do.

To calculate average hourly income (A.H.I.), take the number of days worked in the year, frequently 212, multiply by the hours per day spent treating patients, frequently seven, and divide into last year's gross income. We now have an annual A.H.I.

In the same general way a monthly A.H.I. can be readily calculated using last month's gross income divided by the hours worked. Seeing the A.H.I. every month helps to identify unhealthy trends in the financial side of a practice and to initiate remedial action just as soon as it is needed.

Compilation of income information can be carried out by the receptionist, bookkeeper or accountant, or dentist but a dentist's energies are most profitably employed treating patients.

The dentist, however, is the best person to interpret the data. He, or she, is aware of what is going on in the practice and should be the first to understand the implications of trends defined by the data and initiate corrective action as required.

Orientation to the Future

Until recently, dentists monitored their financial performance as it compared to that of previous years. But I believe that such an orientation to the

past is unsuited to today's fast-changing overhead problems which are unlikely to improve in the future.

I suggest, instead, that we map out a set of reasonable financial goals for the future. The goals should be monitored as time passes and any necessary modifications made to ensure targets are not missed.

This sort of thinking is encapsulated in Canadian Pacific's TV advertisement: "We're proud of yesterday, but we're planning for tomorrow."

*by Dr. A.E. MacLeod
Chairman, Editorial Board*



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In the News

Briefly —

The University of British Columbia is the first dental school in the world to have a simulator teaching unit.

Surgical removal of impacted teeth, endodontics, local anesthetic techniques, placement of orthodontic brackets, prosthodontics, periodontics, operative techniques and pedodontics will be covered when the unit is completed.

So far, the school has only the model settings for teaching operative dentistry and crown and bridge work, reports UBC's dean of the Faculty of Dentistry, Dr. Beagrie, in the school's newsletter.

Purchase of the unit was made possible by a grant from the Woodward Foundation.

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Denture therapists can be a valuable part of the dental health team, Dr. R.R. Schiewe writes in the March 1982 issue of Ontario Dentist.

The Ontario Dental Association president, quoting his reply to the Minister of Health concerning the recent denture therapy controversy, said the Association continues to "support and encourage the continuing development of denture therapists as part of the oral health care team, but feels that the development of the full integration of denture therapists will be inhibited as long as independent practice by therapists is tolerated."

The Minister of Health, on advice from the Ontario Council of Health, recently rejected the recommendations presented by the Dickens Committee to change the current Denture Therapists Act, allowing denturists to offer primary services to the public.

The minister's rejection means denturists may continue to provide full upper and lower dentures, relines and repairs, directly to the public, but must work under the direct supervision of a dentist for any aspect of the provision of partial dentures.

From the Canadian Society of Public Health Dentists' newsletter comes news that public health units will be established in Newfoundland to co-ordinate community health activities on a regional basis. Each unit will have a chief administrator as the Regional Medical Health Officer, public health nurses, public health inspectors, a nutritionist, dental hygienist, and health educator.

In Ontario, guidelines are being written for phase one of the Preventive Dental Core Programs. This phase includes the fluoride program, dental health education and oral hygiene instruction. It is expected these programs will be implemented by all 43 local health units in 1982.

Dental hygienists and assistants provided oral hygiene instruction, education and prevention to almost 90,000 British Columbia elementary school children last year. Of this total, almost 60,000 received self-applied fluorides and 79,000 received dental inspections.

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A Symposium on Oral Microbiology has been tentatively scheduled in conjunction with the Canadian Society for Microbiology meeting June 7 at Laval University, Quebec City.

Speakers participating in the symposium are:

Dr. B.C. McBride of the University of British Columbia, who will discuss adherence in the bacterial colonization of the mouth; Dr. I. Hamilton, University of Manitoba, whose topic is multiple sugar transport systems in streptococcus mutans growing in continuous culture; University of Toronto's Dr. R.P. Ellen on gram-positive bacteria: natural acquisition and role in caries and periodontal diseases; Dr. D. Mayrand of Laval University, who will speak about gram-negative anaerobic bacteria: occurrence and pathogenic potential in periodontal disease; Dr. G. Bowden, University of Manitoba, discussing antigenic analysis of oral bacteria; and Dr. C. Mouton, Laval University, on humoral

aspects of host responses in periodontal diseases.

The symposium is open to interested persons. There is no registration fee.

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CDA pamphlets are achieving record popularity with more than 475,000 distributed over the past 12 months, an increase of over 100,000 from the previous year.

The distribution growth reflected a jump of more than 25 per cent in the number of orders placed by both the dental profession and the public. Of the total 477,239 pamphlets dispensed, 399,426 were in English.

"Facts Favour Fluoridation" proved the most popular with 89 orders placed for 38,066 pamphlets. Other favourites included "Do You Have Periodontal Disease?" (34,670 pamphlets), the bilingual "Dangerous in Bed/ Menace pendant le sommeil" (32,900), "Do it Yourself Oral Hygiene" (32,096) and "Eating Properly for Better Dental Health" (22,726).

"Souffrez-vous de périodontite?" was the most popular French pamphlet, with 16,627 distributed. Next in line was "La santé dentaire grâce à une bonne alimentation" with 10,154.

Large orders were also placed for "Sauvez vos dents — attaquez-vous à la racine du mal" (6,467), "Précautions à prendre après chirurgie buccale mineure" (5,289) and "Vous fumez? faites-vous examiner la bouche" (4,839).

The two latest pamphlets, introduced last fall, called "Do You Smoke? Have your Mouth Checked" and "Do it Yourself Oral Hygiene", have enjoyed notable success.

In the space of six months, 389 orders representing 49,286 pamphlets were placed for these two English publications. Over 50 orders for 8,090 of the French counterparts were distributed.

CDA's communications department is already in the process of producing three more pamphlets dealing with partial and complete dentures and TMJ problems.

Dr. Ralph Brooke, chairman of the Department of Oral Medicine at the University of Western Ontario, was recently appointed Dean of the school's Faculty of Dentistry.

Effective July 1, Dr. Brooke will assume the seven-year appointment now held by Dr. Wesley Dunn, who has been Dean since 1965.

A graduate from Leeds University in dentistry in 1957 and medicine in 1962, Dr. Brooke holds fellowships from the Royal College of Surgeons in England and the Royal College of Dentists in Canada. He is the immediate past president of the Canadian Academy of Oral Pathology.

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"Ontario Dentist", the monthly Journal of the Ontario Dental Association, has a new editor.

Dr. David Kenny, a graduate of the Faculty of Dentistry, University of Western Ontario in 1970 and the University of Toronto with a diploma in Paedodontics in 1973 and PhD in 1976, took over his new role in December.

He was Chief of Dentistry at the Children's Hospital of Eastern Ontario in Ottawa from 1977 to 1981 before becoming Dentist-in-Chief at the Hospital for Sick Children in Toronto and Associate Professor at the Department of Paedodontics, University of Toronto.

Dr. Kenny succeeds as editor Dr. Marvin Klotz under whom Ontario Dentist evolved as a crisp journal-cum-newsmagazine for the voluntary members of the Ontario Dental Association. For his contribution to the profession, Dr. Klotz was presented with an oil painting by Dr. John Palmer.

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The Department of National Health and Welfare has produced a new edition of Canada's Food Guide.

The revised Guide, used to assist Canadians in making sensible food choices to satisfy nutrient needs and energy requirements, is almost identical to the previous version in style and format. However, changes include an

integration of the nutrient recommendations, serving sizes in metric, changes in the names of the two food groups to indicate the variety in food choices available, and changes in each food group.

Canada's Food Guide, which was included in CDA's 1982 National Dental Health Month planning kit, continues to be widely used as an educational tool in health and related programs across Canada.

For further information on the revised Guide, contact the Nutrition Programs Unit, Health Promotion Directorate, Health Services and Promotion Branch, Ottawa, Ontario, K1A 1B4.

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The American Fund for Dental Health is looking for proposals for research and special projects to be considered for grants in 1983.

The Fund is interested in projects dealing with access to dental care, prevention of dental disease, dental quality assurance, and improvement of the educational process in dentistry.

Applications will be accepted from institutions, organizations and individuals up to June 1, 1982. Awards, which will be announced in December, may be made to support a project for a maximum of three years. For guidelines, contact the Director of Programs, American Fund for Dental Health, 211 East Chicago Avenue, Chicago, Illinois 60611.

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The International Journal of Periodontics & Restorative Dentistry has won two awards for editorial excellence and graphic quality. It won the Golden Pencil Award for creative use of illustrations and graphics from the International College of Dentists and the Excellence in Journal Design and Production award from the Association of American Publishers.

The Canadian Dental Association Journal won the Golden Pencil Certificate of Merit for inventive typography and handling of illustrations from the International College of Dentists in 1980.

The American Fund for Dental Health is supervising the delivery of dental services over a four-year period and conducting annual checkups of over 25,000 children in 10 rural and urban communities across the United States, thanks to a \$653,628 grant from The Robert Wood Johnson Foundation of Princeton, New Jersey.

The Fund hopes to determine whether the use of dental services, such as weekly fluoride mouthrinse applications and classroom lessons, will improve the dental health forecast of elementary and junior high school students.

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The British Dental Association has planned its 102nd annual and scientific meeting for June 2 to 5 in Brighton, England.

On the agenda are clinics dealing with current trends in restorative dentistry and pre-prosthetic surgery, temporomandibular joint function and dysfunction, the health of the dentist, oral and maxillo-facial deformities, and computers in general dental practice.

Among the featured speakers are Dr. C. Molin from Sweden who will discuss the psychological aspects and indications for treatment of TMJ, and Dr. W. Barlow, discussing postural back and neck pains.

Also scheduled are a presidential reception and luncheon, annual meeting dinner, FDI lunch, golf competitions and ladies' social program.

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International Expo-Dental '82, which is expected to attract 25,000 visitors, takes place from June 9 to 13 at Pavilion 7, Milan International Trade Fair.

A significant dental event in Europe, the exhibition will cover nine areas including consumption material for dentistry and dental technique, equipment used in the dental field, pharmaceutical products, products for dental prosthesis laboratories, precious alloys used in dentistry, and the specialized technical and scientific media that promotes dentistry.

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A. No. Ultra-speed film will remain available for the foreseeable future.

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A. Your equipment must have a timer capable of the shorter exposures required and/or be adaptable to long cone techniques (which also deliver better detail, of course).

Q. How does image quality compare?

A. Favorably. Without magnification, you are unlikely to see any difference. Radiographic contrast, however, may be a little lower.

Q. Does Ektaspeed film require a change in my exposure technic?

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Without any work on your part, an automatic coverage increase like this offsets some of the effects of inflation on your coverage. It's one of the ways the Canadian Dentists' Insurance Program tries to make it easier for you to manage your own insurance affairs . . . and save money.

Please review your coverage now!

Even with the 10% increase, you may be dangerously under-insured, given today's high replacement costs for buildings, improvements, and equipment. Please review your coverage now. If you wish to increase coverage by more than 10%, write CDSPI.

If you don't buy Office Insurance through the dentists' plan, please read this important notice.

While costs of property insurance are increasing in many parts of Canada, the Canadian Dentists' Insurance Program has managed to maintain stable Office Contents premium rates since 1979 — despite the steady rise in the cost of paying claims. This may be a good time for you to compare our rates and policy provisions with what you're paying now. For information call 1-800-268-3792 toll free (961-7117 in Metro Toronto).



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	Neosono	Imitators
1. Published clinical studies (11) proving accuracy.	Yes	No
2. Published studies showing accuracy with pulp present.	Yes	No
3. Provide the distance, in tenths of a millimeter, from apical foramen.	Yes	No
4. Ability to set circuit to stop at preset distance (e.g. 1/2mm short), not just a range of 1 mm.	Yes	No
5. Ability to get exact length without looking at device via audible signal (visual reading also available).	Yes	No
6. Different audible and visual signal if reamer passes apex. Avoids overinstrumentation.	Yes	No
7. Ability to obtain length with <u>nothing attached</u> to reamer.	Yes	No
8. Avoid calibrating unit each time device is used.	Yes	No
9. Ability to compensate for variations in patient resistance.	Yes	No
10. Does not require large, cumbersome lip attachment (miniaturized ground).	Yes	No
11. Does not require electrical isolation of patient from chair, etc.	Yes	No
12. Made and serviced in <u>U.S.A.</u> by manufacturer.	Yes	No
**13. Models with all 12 unique features above starting at \$299.	Yes	No



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14. Ability to read the distance from apical foramen directly on a screen in millimeters (to 1/10th mm).	Yes	No
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Journal of Endo., Vol. 2, No. 7, July 1976, p. 215.
Oral Surgery, Oral Medicine, Oral Pathology, Vol. 38, No. 3, Sept. 1974, pp. 469-473

Also see "joltless" pulp tester, Madajet, and new Adalite fiberoptics to attach to your handpiece at the California Dental Meeting, Booths 354, 985 and 1074, and at every national, state, local and Canadian convention. See programs for booth numbers.

In the News

Contract Features & Provisions

The following is the first in a series of reports dealing with features and contract provisions of the Canadian Dentists' Insurance Plan.

Basic Life Insurance

Maximum coverage available is \$370,000. The term insurance offered under the C.D.I.P. is level term to age 80 and convertible to age 80. At present, the plan includes a reduction formula at age 65.

The reduction formula would be applied in the following manner for a dentist with \$200,000 of life insurance.

To age 65	\$200,000
Age 65 to age 69	Less 50% or \$121,000 whichever is less (for our example, the insurance reduces to \$100,000).
Age 70 to age 74	Less 50% or \$31,000 whichever is less (for our example, the

Age 75 to age 80

Age 80

insurance reduces to \$31,000).

Less 50% or \$13,000 whichever is less (for our example, the insurance reduces to \$13,000).

Insurance under C.D.I.P. ceases.

At any reduction point, age 65, 70 or 75, the insured may convert all or a portion of the life insurance dropping off.

Every insured person should be aware that the life insurance **policy** issued by the Imperial Life is assignable. The life insurance program was designed in such a way that a **policy** is issued rather than a certificate of insurance, which is the usual route taken. Many bank managers are not aware of this fact.

Having the option to use life insurance policies from C.D.I.P. as collateral represents a distinct advantage for a dentist.

It is also suggested that if a person is applying for \$100,000 or more of life

insurance, that a request be made to issue the coverage by means of several policies. For example, insurance of \$150,000 could be issued as three policies of \$50,000 each, or \$100,000 could be issued as two \$25,000 policies and one \$50,000 policy.

The reason for this suggestion is flexibility — why give the bank an assignment of a \$100,000 policy to cover a \$25,000 loan? Furthermore, in later years there may not be a need for as much life insurance as the individual is carrying and a person could terminate some of the coverage by cancelling a \$25,000 or \$50,000 policy.

The life insurance program is there for the needs of dentists. It is a low cost, flexible program that meets the demands found in the marketplace.

It is essential that the provincial benefit chairman be familiar with all the contract features. If you need additional information, please call C.D.S.P.I., 2 St. Clair Ave. East, 9th floor, Toronto, Ont. M4T 2W1 (416) 961-7117.

KETAC-CEM

A New Glass Ionomer Cement

Ketac-Cem, the newest name in dental cements—has a lot going for it.

Ketac-Cem is strong. It's adhesive and actually provides a chemical bond to tooth structures, stainless steel and semi-precious metals.

Combining the best features of zinc phosphate, carboxylate and silicate cements, Ketac-Cem is compatible with the pulp and has been formulated to work with crowns and bridges. It is resistant to creep, good for long spans and has a low film thickness and high density.

The ultimate cement, Ketac-Cem, the new glass ionomer cement from Espe and Ash Temple.

Ash
Temple
LIMITED

We know what goes into helping dentists.

Dentists Dentistes

**Get the facts now
about the challenge
and opportunity of a
Canadian Forces career.**

If you have a degree in dentistry and are licensed to practice in a Canadian province for the current year, you may join the Canadian Forces as a commissioned officer.

The Canadian Forces offers an established practice, modern equipment, good income, fringe benefits, as well as a career and post-graduate training opportunities.

The starting salary for graduates without experience is \$32,760 and up to \$40,440 for experienced dentists.

Join the proud people serving across Canada and in Europe. For more information visit your nearest Recruiting Centre or call collect—we're in the Yellow Pages under Recruiting, or send this coupon.

**Renseignez-vous dès
aujourd'hui sur le défi et les
possibilités d'une carrière
dans les Forces canadiennes.**

Si vous possédez un diplôme en médecine dentaire et le droit de pratiquer cette année dans une province canadienne, vous pouvez vous joindre aux Forces canadiennes comme officier.

Les Forces canadiennes vous offre une pratique établie, des installations modernes, un bon revenu, des avantages sociaux ainsi que la chance de parfaire vos études tout en faisant carrière dans les Forces.

Le salaire varie de \$32 760, pour les nouveaux diplômés, à \$40 440, pour les dentistes d'expérience.

Joignez-vous à ceux qui servent fierement notre pays au Canada et en Europe. Pour plus de renseignements, visitez le centre de recrutement le plus près de chez vous ou téléphonez à frais virés—vous nous trouverez dans les Pages jaunes, sous la rubrique Recrutement, ou postez ce coupon.

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Adresse _____

Ville _____ Prov. _____ Code postal _____

Diplôme _____

N-CDAJ

Imbattable la vie dans les Forces!

A Canadian visits Botswana

In August 1980 I arrived in Botswana with my family, as volunteers with Canadian University Services Overseas to live in Francistown as Regional Dental Officer.

Botswana is a landlocked country in Southern Africa, surrounded by Namibia, Zimbabwe, and the Republic of South Africa. Two thirds of Botswana is covered by the sands of the Kalahari Desert. The remaining one third is hot, dry and dusty except during a brief rainy season between December and February.

The principal livelihood for its 800,000 inhabitants involves cattle ranching, subsistence farming and the mining industry. Customs, diet, traditions and family structures are changing rapidly in Botswana as Western values are adopted in many subtle ways.

Sugar consumption in Botswana is

three to four times higher than average for the African continent. Sugar imports from 1974 to 1979 increased 69 per cent. Surveys carried out over the last 10 years show a dramatic increase in the prevalence of dental caries in primary school children. DMF scores in a 1978 study reflect the pattern of change; 15-19 year olds had a higher DMF average (1.7) than the 20-24 year old age group (.8). Clinical observations suggest the same pattern: that the 32 perfect teeth of the 60-year-old, still a common sight here, will soon be a phenomenon of the past as the number of caries-free mouths decreases in primary schools each year.

There are, at present, four dentists employed with Dental Health Services. A program to train dental therapists was started in 1975, resulting in saturation of training facilities by qualified therapists. The school now is undergoing expansion. This is due for completion early in 1982, with a capacity to graduate five therapists a year from the two-and-one-half-year program. A qualified dental therapist

is trained to implement primary preventive programs, and carry out basic restorative and surgical services under the supervision of a dentist.

The role of Regional Dental Officer is a challenging one, full of variety, surprises and rewards.

This year Michael Ojoleck, third-year dental student from Dalhousie University spent his summer vacation in Botswana, volunteering his services within our program. During his seven weeks in Francistown he participated in classroom lectures and oral examinations of school children, as well as assisting in operative and oral surgery procedures in the hospital and dental clinic. He hopes to use the experience and information gained here in an elective topic on the importance of preventive dentistry in developing countries.

The author, Dr. A.L. Nette, wishes to acknowledge the permission of the Permanent Secretary, Ministry of Health; Principal Dental Officer, Dental Health Services; and CUSO Botswana for use of information cited in this article.

REGIONAL DENTAL DIRECTOR

Beausejour, Manitoba

Applications are invited from qualified dentists who wish to be considered for employment with the Manitoba Dental Care Program. The incumbent is responsible for the overall delivery of the Childrens Dental Program in the Eastman and Interlake Regions as well as delivering and ensuring the implementation of a public preventive program. A team approach utilizing dentists, dental nurses and phase 2 dental assistants is used to deliver both preventive and treatment care services. Travel is involved.

Candidates should be graduates from a recognized school of dentistry eligible for licensure with the Province of Manitoba and possess some experience in private or public health dentistry. Preference will be given to those having post-graduate training in dental public health or with proven experience in directing a dental program and providing professional consultation in the field of dental care.

SALARY: \$37,868 — \$47,289 per annum

Please forward completed Civil Service application, quoting competition number 170, directly to:

**Department of Health
Personnel Management Services
270 Osborne Street N.
Winnipeg, Manitoba
R3C 0V8**

MANIT  BA



Myo-tronics Research, Inc. presents

"Neuromuscular Occlusion"

— Scientifically Valid

— Clinically Sound

Neuromuscular Occlusion is growing in acceptance throughout the world as biomedical electronics for dentistry provides a new sophistication of validity to dental practice. Our Seminars will present straight-forward methods of utilizing electronically automated techniques that simplify and expedite clinical procedures, producing a relaxed neuromuscular occlusion:

- without manual manipulation of the mandible.
- without the influence of proprioception.
- without the distortion or displacement of the mandible.

You will learn:

1. The economic significance of building TMJ in your practice —

How it provides

- An Added Service to Your Patients
- The Insurance Codes You Need to Use

You will be given the specific diagnostic and treatment code numbers which will allow you to handle insurance claims ethically and effectively. You will also receive specific billing forms which you can most conveniently use in order to receive maximum insurance claim benefits.

How to — respond to the insurance company and cause reconsideration of a rejected legitimate claim.

How — recent court decisions reinforce your rights to reimbursement and how to call these specific court decisions to the attention of the insurance carrier.

2. The new world of Biomedical Instrumentation in everyday dental practice

How to — incorporate biomedical electronic instrumentation to supply diagnosis and treatment of musculoskeletal dysfunctions of the head and neck without complicating your practice. You

will come to wonder how you practiced without the information it provides.

3. Electronically automated registration of occlusal position

How to — first relax the craniomandibular muscles, then electronically register the occlusal jaw position that is compatible with a relaxed neuromuscular environment.

4. Coronoplasty (Occlusal Adjustment)

How to — perform an effective, straight-forward 1-2-3 technique for the elimination of prematurities by grinding. This occlusal stabilization is effective in patients with natural teeth or a prosthetic occlusion.

5. Full mouth reconstruction

How to — eliminate the mystique and mystery from full mouth reconstruction which will allow you to treat these cases with confidence. When you electronically accomplish muscle relaxation with the Myo-monitor, followed by automated maxillo-mandibular registration with the Myo-monitor, you take away all guesswork and provide an uneventful, muscularly quiet physiologic environment for the finished reconstruction.

6. Complete and partial dentures The New World of Electronically Automated Border Molded Impressions and Registration of Occlusion

How to — bring new standards of retention, comfort and renewed function to edentulous or partially edentulous patients.

7. Orthodontics — focus on function

How to — simplify orthodontic procedures by treating to the electronically determined, muscularly-oriented position of the mandible to the skull. In many cases, the change in skeletal relation after muscle relaxation makes available the space into which to move teeth, without the indication for multiple extractions.

Methods and appliances for orthodontically increasing vertical dimension are greatly expanding the functional scope of orthodontic treatment, with a marked increase in adult orthodontics. The functional objective of the application of biomedical electronics to orthodontic diagnosis and treatment is the establishment of a relaxed neuromuscular environment for the finished case.

The three recommended levels of Myo-tronics Education are:

STEP I — Introductory.

These regional seminars are recommended for the dentist unfamiliar with neuromuscular principles. Fee \$195. Includes 1 staff at no charge.

New Orleans, LA	March 12-13
Boston, MA	March 12-13
Houston, TX	March 19-20
Denver, CO	March 26-27
Pittsburgh, PA	April 1-2-3
San Francisco, CA	April 17-18
University of West Virginia, Morgantown, WV	April 30-May 1-2
*Knoxville, TN	May 6-7-8
Washington, DC	May 14-15
Indianapolis, IN	May 14-15
Ottawa, CAN	May 20-21-22
Portland, OR	June 11-12
Las Vegas, NV	June 12-13
Montreal, CAN	June 18-19
Monterey, CA	July 17-18
Regina, CAN	Sept. 3-4
Minneapolis, MN	Sept. 10-11
Salt Lake City, UT	Sept. 18-19
Atlanta, GA	Sept. 24-25
U.C.L.A., Los Angeles, CA	Sept. 24-25-26
New York, NY	Oct. 1-2
Omaha, NE	Oct. 8-9
Phoenix, AZ	Dec. 4-5

*site of World's Fair

STEP II — Advanced Seminars.

These seminars are designed as intensive comprehensive workshops for dentists who have attended a previous neuromuscular occlusion regional seminar. Seattle fee \$595.

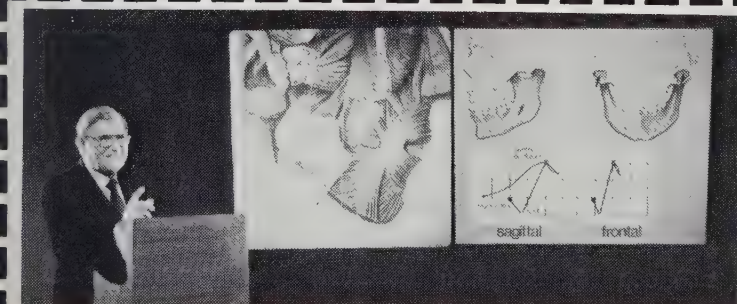
Seattle, WA (5 day)	Edmonton, CAN (3 day)
April 12 thru 16	June 17, 18, 19
June 28 thru July 2	
August 9 thru 13	
Oct. 18 thru 22	

STEP III — Special.

Throughout the year Myo-tronics will have intensive 2 or 3 day seminars focusing on a specialty area of dentistry. Attendance at a previous regional seminar is recommended.

Seattle, WA

TMJ Seminar — April 23-24
Prosthodontic Workshop — July 22-23-24
Orthodontic Seminar/Workshop — Aug. 23-26
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Continuing Education Approved: AGD 8 maint. cr/day, CDA 7 cr/day. For Seminar Outline, brochure, fees and other details, please select location above, complete and mail. Seminar Preference _____, Dates _____.

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For quick information Telex 32-8410 or phone 1-800-426-0316

CDA Resource Centre/Le Centre de documentation

Copies of the following articles are available at no charge from the library. Original abstracts which were included with the references are provided below. Part of this bibliography was generated with the help of MEDLARS, a computerized information retrieval system for the health sciences field, which has been operational at the library since February 1982, and is at the disposal of all members.

On peut se procurer sans frais à la bibliothèque le texte des articles ci-dessous. Le cas échéant, nous avons repris le résumé qui accompagnait la référence. Cette bibliographie a été dressée, en partie, grâce à MEDLARS, un service d'information informatisé sur les sciences de la santé, que la bibliothèque exploite depuis le mois de février 1982 et qu'elle met au service de tous les membres.

QUALITY ASSURANCE AND PEER REVIEW IN DENTISTRY

LA RÉVISION PROFESSIONNELLE (EN DENTISTERIE)

Abramowitz, Joseph, and Mecklenburg, Robert E. **Quality of care in dental practice: the approach of the Indian Health Service.** *Journal of Public Health Dentistry*, v.32, no.2, Spring 1972, pp.90-99.

Barish, Nathaniel H., and Collins, William K. **Peer review for quality care in private solo dental practice.** *Journal of the American Dental Association*, v.89, no.4, Oct. 1974, pp.866-870.

Abstract: "The history of and demand for peer review of medical care and the existence of peer review of dental care in group practice and in tax-supported clinics is described. This type of evaluation is needed in the offices of private solo practitioners who are paid on a fee-for-service basis. A procedure for conducting this review is presented."

Bronson, Herbert L. **Avoiding potential pitfalls in peer review.** *Journal of the California Dental Association*, v.3, no.3, Mar. 1975, pp.50-55.

Cons, Naham C. **Method for post-treatment evaluation of the quality of dental care.** *Journal of Public Health Dentistry*, v.31, no.2, Spring 1971, pp.104-108.

De Jong, Norman, and Dunning, James M. **Methods for evaluating the**

quality of programs of dental care. *Journal of Public Health Dentistry*, v.30, no.4, Fall 1970, pp.223-228.

Jago, John D. **Issues in assurance of quality dental care.** *Journal of the American Dental Association*, v.89, no.4, Oct. 1974, pp.854-865.

Abstract: "This review of assurance of quality of dental care concerns eight broad issues. First, the relevance of the professional model of care — the claim to professional dominance and to professional trustworthiness — is described. The issues of professional resistance to government initiatives in quality assurance and the possibilities for consumer influence on the quality of care are discussed. The evaluation of quality of care rendered in the private sector as distinct from that in dental care programs is the fourth issue. Another is the problem encountered in devising suitable tools for measuring adequacy of care. Sixth is the question of whether peer review is an adequate method of quality assurance, and seventh is the conflict of interests within the dental profession itself. Finally, the question of what to do about work of a consistently low standard is discussed. Some predictions are made of future trends in the assurance of quality dental care."

Kress, G.C. **Toward a definition of the appropriateness of dental treatment.** *Public Health Reports*, v.95, no.6, Nov.-Dec. 1980, pp.564-571.

Milgrom, P., Ratener, P., Conrad, D., and Weinstein, P. **Determinants**

of the quality of restorative dental care. *Medical Care*, v.18, no.4, Apr. 1980, pp.400-415.

Abstract: This article reports the results of an analysis to determine the relationships between the quality of restorative dental care for 1,466 patients and 9 categories of dentist characteristics for 102 volunteer Washington practitioners. In this study, patients were recalled and restorations were examined clinically. Questionnaires were administered to patients and dentists. The dependent measure is a weighted average of scores for operative dentistry and crown and bridge. Stagewise regression was used to adjust for differences in patient oral health and assessor bias. Models were postulated in each category of dentist characteristics and beta vectors were estimated by multiple regression. The best predictors formed a significant model ($p=0.000$) which explained 26 per cent of the variance."

Milgrom, P., Weinstein, P., and Ratener, P. **Quality assessment as a form of continuing dental education: changing dentist clinical performance.** *Journal of the American Dental Association*, v.101, no.2, Aug. 1980, pp.258-264.

Abstract: "Individualized clinical assessment of 105 volunteer dentists in Washington State was an experiment in continuing dental education. The two-year study evaluated the effect of counseling on the improvement of individual dentist performance as it affected the proportion of serviceable

Motrin

(ibuprofen)

Product Information

Action: Ibuprofen has demonstrated anti-inflammatory, analgesic and antipyretic activity in animal studies designed to specifically demonstrate these effects. Ibuprofen has no demonstrable glucocorticoid effect.

Following a single 200 mg dose of ibuprofen in humans, useful blood levels were demonstrable in 45 minutes and still present in six hours but at barely detectable levels. Peak levels occurred at approximately one hour after ingestion. Levels were lower when taken in conjunction with food.

Ibuprofen is rapidly metabolized and eliminated in the urine. The excretion of ibuprofen is virtually complete 24 hours after the last dose. The serum half-life of ibuprofen is 1.8 to 2 hours. There is no evidence of drug accumulation or enzyme induction.

Ibuprofen has been found to be less likely to cause gastro-intestinal bleeding in doses usually used than is acetylsalicylic acid.

Clinical trials in man have shown activity of a dose of 1200-1800 mg of ibuprofen daily to be similar to that of 3.6 grams of acetylsalicylic acid daily.

Indications and Clinical Uses: Motrin (ibuprofen) is indicated for the treatment of rheumatoid and osteoarthritis. Motrin is also indicated for the relief of mild to moderate pain, accompanied by inflammation, in conditions such as musculo-skeletal trauma and post-dental extraction. Motrin is also indicated for the relief of pain associated with dysmenorrhea.

Contraindications: Ibuprofen should not be used in patients who have previously exhibited hypersensitivity to it, or in individuals with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to acetylsalicylic acid or other nonsteroidal anti-inflammatory agents. (see WARNINGS).

Ibuprofen should not be used during pregnancy, in nursing mothers or in pediatric patients because its safety under these conditions has not been established.

Warnings: Anaphylactoid reactions have occurred in patients with known A.S.A. hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported in patients receiving ibuprofen. Peptic ulceration, perforation, or severe gastrointestinal bleeding can have a fatal outcome, and although few such reports have been received with ibuprofen, a cause and effect relationship has not been established. Ibuprofen should be given under close supervision to patients with a history of upper gastrointestinal tract disease.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in colour vision have been reported. If a patient develops such complaints while receiving ibuprofen, the drug should be discontinued and the patient should have an ophthalmologic examination.

Fluid retention and edema have been reported in association with ibuprofen, therefore, the drug should be used with caution in patients with a history of cardiac decompensation or renal disease.

Ibuprofen, like other nonsteroidal anti-inflammatory agents, can inhibit platelet aggregation but the effect is quantitatively less and of shorter duration than that seen with acetylsalicylic acid. Ibuprofen has been shown to prolong bleeding time (but within the normal range) in normal subjects. Because this prolonged bleeding effect may be exaggerated in patients with underlying hemostatic defects, ibuprofen should be used with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients on ibuprofen should be cautioned to report to their physicians signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

When ibuprofen is added to the treatment program of patients who have been on prolonged corticosteroid therapy, and it is decided to discontinue this therapy, the corticosteroid should be tapered slowly to avoid exacerbation of disease or adrenal insufficiency.

Aseptic meningitis has been reported in connection with ibuprofen therapy in patients with systemic lupus erythematosus. Such patients may also develop hypersensitivity reactions to ibuprofen such as fever, rash or abnormal liver function more often than those with other disorders. Caution should therefore be exercised when considering ibuprofen therapy for patients with systemic lupus erythematosus.

Drug Interactions

Coumarin-type anticoagulants - Several short-term controlled studies failed to show that ibuprofen significantly affected prothrombin times or a variety of other clotting factors when administered to individuals on coumarin-type anticoagulants. However, because bleeding has been reported when ibuprofen and other nonsteroidal anti-inflammatory agents have been administered to patients on coumarin-type anticoagulants, the physician should be cautious when administering ibuprofen to patients on anticoagulants.

A.S.A.: Animal studies show that A.S.A. given with nonsteroidal anti-inflammatory agents including ibuprofen yields a net decrease in anti-inflammatory activity with lowered blood levels of the non-A.S.A. drug. Single dose bioavailability studies in normal volunteers have failed to show an effect of A.S.A. on ibuprofen blood levels. Correlative clinical studies have not been done.

Adverse Reactions: The following adverse reactions have been noted in patients treated with ibuprofen:

Note: Reactions listed below under Causal Relationship Unknown are those which occurred under circumstances where a causal relationship could not be established. However, in these rarely reported events, the possibility of a relationship to ibuprofen cannot be excluded.

Gastrointestinal: The adverse reactions most frequently seen with ibuprofen therapy involve the gastrointestinal system.

Incidence 3 to 9%: nausea, epigastric pain, heartburn
Incidence 1 to 3%: diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the gastrointestinal tract (bloating or flatulence).

Incidence less than 1%: gastric or duodenal ulcer with bleeding and/or perforation, gastrointestinal hemorrhage, melena, hepatitis, jaundice, abnormal liver function (SGOT, serum bilirubin and alkaline phosphatase).

Central Nervous System:

Incidence 3 to 9%: dizziness

Incidence 1 to 3%: headache, nervousness

Incidence less than 1%: depression, insomnia

Causal relationship unknown: paresthesias, hallucinations, dream abnormalities

Dermatologic

Incidence 3 to 9%: rash (including maculopapular type)

Incidence 1 to 3%: pruritis

Incidence less than 1%: vesiculobullous eruptions, urticaria, erythema multiforme

Causal relationship unknown: alopecia, Stevens Johnson syndrome

Special Senses

Incidence 1 to 3%: tinnitus

Incidence less than 1%: amblyopia (blurred and/or diminished vision, scotomata and/or changes in colour vision). Any patient with eye complaints during ibuprofen therapy should have an ophthalmological examination (see PRECAUTIONS)

Causal relationship unknown: conjunctivitis, diplopia, optic neuritis

Metabolic:

Incidence 1 to 3%: decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Hematologic:

Incidence less than 1%: leukopenia and decreases in hemoglobin and hematocrit

Causal relationship unknown: hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes (e.g. purpura, epistaxis, hematuria, menorrhagia).

Cardiovascular:

Incidence less than 1%: congestive heart failure in patients with marginal cardiac function, elevated blood pressure

Causal relationship unknown: arrhythmias (sinus tachycardia, sinus bradycardia, palpitations)

Allergic:

Incidence less than 1%: anaphylaxis (see CONTRAINDICATIONS).

Causal relationship unknown: fever, serum sickness, lupus erythematosus syndrome.

Endocrine:

Causal relationship unknown: gynecomastia, hypoglycemic reaction

Renal:

Causal relationship unknown: decreased creatinine clearance, polyuria, azotemia

Symptoms and Treatment of Overdosage: A nineteen month old child weighing 12 kg ingested from 2800 to 4000 mg and presented with apnea, cyanosis and responded only to painful stimuli. Oxygen and parental fluids were given and at 12 hours she appeared completely recovered. Two other children (10 kg each) ingested 1200 mg of ibuprofen each and there were no signs of acute intoxication or late sequelae. A 19 year old male who had ingested 8000 mg of ibuprofen reported dizziness, and nystagmus was noted. He recovered with no reported sequelae after parental hydration and three days' bed rest.

In cases of acute overdosage, the stomach should be emptied by vomiting or lavage, though little drug will likely be recovered if more than an hour has elapsed since ingestion. Because the drug is acidic and is excreted in the urine, it is theoretically beneficial to administer alkali and induce diuresis.

Dosage and Administration: *Rheumatoid arthritis and osteoarthritis:* The initial daily dosage in adults is 1200 mg divided into 3 or 4 equal doses. Depending on the therapeutic response, the dose may be adjusted downward or upward. The daily dosage should not exceed 2400 mg.

Maintenance therapy, once maximum response is obtained, will range from 800 to 1200 mg per day.

Mild to moderate pain associated with inflammation, dysmenorrhea: 400 mg repeated as required every 4 to 6 hours. The daily dosage should not exceed 2400 mg.

Children: Due to the lack of clinical experience, ibuprofen is not indicated for use in children under 12 years of age.

Supplied: 200 mg (yellow), 300 mg (white), 400 mg (orange) sugar-coated tablets and 600 mg (peach) film-coated tablets in bottles of 100 and 1000.

Product monograph available on request.

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Upjohn

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865 YORK MILLS ROAD
DON MILLS, ONTARIO



restorations. The results showed a significant difference."

Novetsky, M., and Razzoog, M.E. Peer review and quality assessment in complete denture education. *Journal of Dental Education*, v.45, no.11, Nov. 1981, pp.763-764.

Power, J.M. Liability and immunity of dentists who serve on peer review committees. *New York State Dental Journal*, v.47, no.5, May 1981, pp.251-253.

Ryge, Gunnar, and Snyder, Mildred. Evaluating the clinical quality of restorations. *Journal of the American Dental Association*, v.87, no.2, Aug. 1973, pp.369-377.

Abstract: "A new method for rating the quality of restorations has been developed and field tested. It involves the same operational procedures that a dentist uses to evaluate restorations in a new patient. The two designations, 'satisfactory' and 'not acceptable' are each broken into two categories that are rated on the basis of surface and color, anatomic form, and marginal integrity. If a restoration does not meet all standards, the reason is included in the evaluation. In a field test of the system, two examiners agreed on the final ratings of about 1,000 restorations in 92% of the instances, and with their first rating in a reexamination of the same restoration in 89% of the instances."

Schonfeld, Hyman K. Quality of dental care: its measurement, description and evaluation. *Journal of the American College of Dentists*, v.38, no.2, Apr. 1971, pp.194-206.

Strauss, R.P., Claris, S.M., Lindahl, R.L., and Parker, P.G. Patients' attitudes toward quality of assurance in dentistry. *Journal of the American College of Dentists*, v.47, no.2, Apr. 1980, pp.101-109.

L'économie du cabinet

Depuis 1978, les frais généraux des cabinets privés ont augmenté à un rythme alarmant.

Partout au Canada, les sociétés de droit éprouvent les mêmes problèmes que les dentistes à fournir des services de qualité à leurs clients, alors que les frais généraux montent en flèche.

Pour le dentiste, une façon de résoudre ce problème est de se renseigner régulièrement sur la situation financière de son cabinet afin de connaître en tout temps le mouvement de ses affaires.

Vérification mensuelle

Le système de vérification est un moyen de se renseigner sur la direction que les affaires prennent chaque mois et chaque année.

Les revenus doivent être identifiés suivant leur provenance de la façon suivante: dentiste(s), hygiéniste(s), restaurations, prothèses, prévention et chirurgie.

Les frais d'exploitation ne doivent pas comprendre les frais fixes comme les frais de premier établissement et les paiements sur les emprunts. Par contre, ils doivent indiquer en détail les dépenses qui ont tendance à changer souvent comme les salaires, le loyer, les matériaux et les frais de laboratoire. Il est recommandé de faire le calcul des frais d'exploitation chaque mois.

Comptes en souffrance

Il est bon que la réceptionniste établisse, à partir du livre des comptes, une liste des patients qui n'ont pas payé le leur, en indiquant les montants qu'ils doivent.

Chaque mois, le dentiste doit réviser cette liste et décider, pour chaque compte en souffrance, quelle mesure

il voudra que la réceptionniste, le comptable ou l'agent de recouvrement prenne. Habituellement, on obtient de bons résultats en chargeant la réceptionniste de téléphoner aux intéressés, leur demandant d'acquitter leur compte pour certaine date, sans quoi celui-ci sera remis à un avocat.

Revenu horaire moyen

Jusqu'à tout récemment, plusieurs dentistes auraient jugé saugrenue l'idée de calculer le revenu d'un professionnel au taux horaire.

Cependant, cette mesure semble être devenue une nécessité pour celui qui veut surnager en ces temps de fortes pressions économiques.

Pour calculer le revenu horaire moyen (R.H.M.), on multiplie le nombre de jours de travail dans l'année (environ 212) par le nombre d'heures de travail dans la journée (environ sept) et on divise le produit par le montant du revenu brut de l'année précédente.

Le même calcul peut s'effectuer sur une base mensuelle en divisant le montant du revenu brut du mois précédent par le nombre des heures de travail durant ce mois.

En sachant quel est le R.H.M., il est possible de déterminer quand les affaires commencent à mal aller et de prendre aussitôt les mesures qui s'imposent pour corriger la situation. Ces renseignements peuvent être compilés par la réceptionniste, le comptable ou le dentiste lui-même, mais il est préférable que ce dernier consacre son temps à soigner ses patients.

Cependant, il reste que le dentiste est la meilleure personne pour interpréter ces données. C'est lui qui doit être au courant de la situation de son cabinet et qui doit comprendre le mouvement de ses affaires s'il veut pouvoir les redresser au moment nécessaire.

Vers l'avenir

Dans le passé, le dentiste surveillait son budget en le comparant à celui de l'année précédente. Ce faisant, il s'orientait sur le passé. Aujourd'hui, cependant, alors que les problèmes

touchant les frais généraux menacent de s'aggraver, il convient de se tourner vers l'avenir en se fixant des objectifs financiers raisonnables qu'on révisera occasionnellement pour s'assurer de les atteindre.

En d'autres mots, on adoptera la philosophie professée par le Canadien Pacifique dans ses annonces télévisées: "Nous sommes fiers du passé, mais nous misons sur l'avenir."

*Par le Dr A.C. MacLeod,
président du Conseil éditorial*

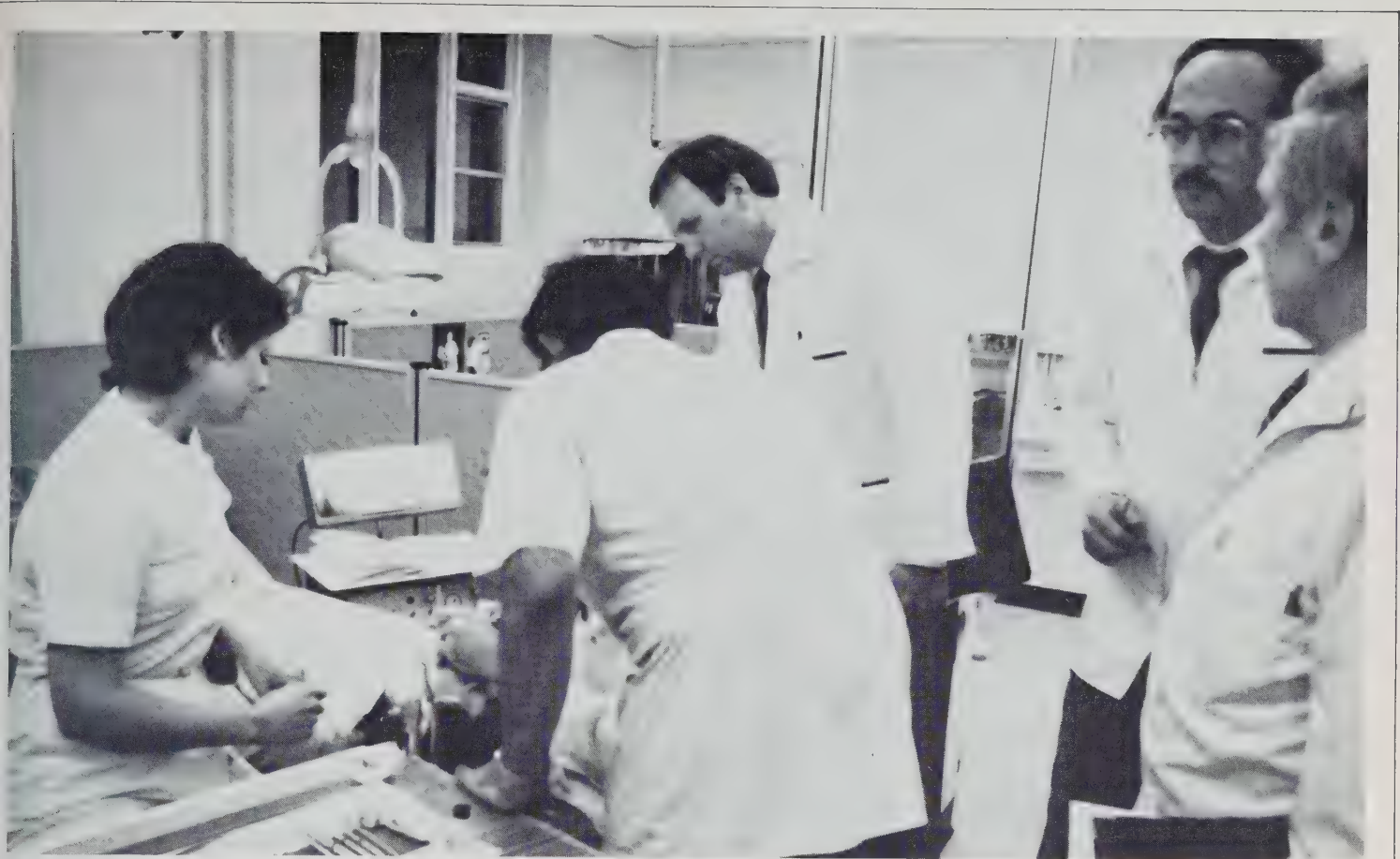
Enseignement agréé dans tout le pays

Les dix facultés de médecine dentaire du Canada ont fait des progrès constants au cours des trente dernières années et elles offrent toutes des programmes de préparation à la licence agréés par l'Association dentaire canadienne.

Depuis la première étude des écoles dentaires du pays menée en 1950 par l'ADC, le programme d'agrément a pris une telle ampleur qu'il comprend maintenant l'enseignement des spécialités et la formation des auxiliaires, dans les universités comme les collèges communautaires.

L'agrément donne aux futurs étudiants l'assurance que le programme de formation offert par une institution se compare favorablement à celui des autres facultés et que l'enseignement qu'il recevra a ou même dépasse la qualité jugée nécessaire par l'Association.

Autre avantage pour les étudiants, depuis 1971, le Bureau national des examens en médecine dentaire accorde un certificat sans autre forme d'examen aux nouveaux licenciés qui ont suivi un programme de formation agréé par l'ADC. Une entente avec l'Association dentaire américaine permet également aux licenciés issus d'une faculté agréée par l'ADC de poursuivre des études supérieures dans une faculté américaine agréée.



Le Dr Robert Kinniburgh, le Dr Pierre Desautels et le Dr Carl Osadetz, directeur des cliniques pour l'Alberta, sont photographiés au cours d'une de quatre visites prévus dans une clinique.

Outre la mise au point de lignes directrices pour l'approbation des programmes d'études menant à la licence, le Conseil de l'éducation en a fait approuver d'autres par le Bureau des gouverneurs portant sur neuf domaines de spécialisation, entre autres: l'orthodontie, la pédodontie, la pathologie buccale, la chirurgie buccale, la périodontologie, l'endodontie, la radiologie buccale et la santé publique.

Les universités canadiennes offrent des programmes d'études agréés dans tous les domaines, sauf en santé publique, en radiologie buccale et en endodontie.

La dernière mise-à-jour des lignes directrices s'est terminée au cours de l'année scolaire 1980-1981, alors qu'on a procédé à la révision du manuel d'évaluation et que le Bureau des gouverneurs a approuvé, au cours d'une réunion tenue à Calgary, les nouvelles catégories d'agrément.

L'Association a examiné onze programmes de formation au cours de l'exercice 1981-1982, à savoir: deux

programmes d'études universitaires, six programmes de spécialisation et trois programmes de formation des auxiliaires. L'approbation entière est valable pour cinq ans.

La mise en oeuvre du programme se fait sur une base entièrement volontaire, en ce sens que ce sont les institutions qui doivent prendre l'initiative et inviter l'ADC à visiter leurs installations. La faculté a droit de regard sur le choix des examinateurs.

Afin d'assurer la justesse et l'impartialité des décisions, on a apporté au cours des dernières années plusieurs modifications à la formation des équipes d'examineurs.

Il a été difficile, au début, de mettre sur pied des équipes d'examineurs pour les programmes de spécialisation canadiens. Ils étaient alors peu nombreux et beaucoup de spécialistes se connaissaient ou étaient associés soit entre eux soit à l'institution qu'il fallait visiter. On a alors fait appel, pendant plusieurs années, à des spécialistes américains.

S'il se pose toujours pour au moins

une spécialité, le problème a disparu pour la plupart des autres et l'ADC fait appel aux associations de spécialistes pour lui suggérer des noms.

Le règlement établi par le Bureau des gouverneurs précise que l'examineur ne doit pas avoir été associé antérieurement à l'institution qui fait l'objet de l'examen. Cette mesure, jointe à l'assentiment de la faculté sur le choix de l'examineur, protège le droit de celle-ci à une juste appréciation.

On a aussi augmenté l'équipe des examinateurs en y joignant un représentant des organismes provinciaux de réglementation. Le premier pas en ce sens a été posé en 1978 lorsqu'on a invité un greffier à faire partie de l'équipe à titre d'observateur.

Pour le cas des programmes d'enseignement menant à la licence, l'équipe comprend un représentant du Bureau national d'examen en médecine dentaire. Le premier directeur permanent du programme d'agrément est le Dr J.V.P. Chatwin, qui occupe le poste depuis 1978.

Les Actualités

Conférence sur l'enseignement de la pathologie buccale



Les personnes qui ont participé à la conférence sur l'enseignement au siège social de l'ADC, à Ottawa, le 16 avril, se sont fait un plaisir de sortir à l'extérieur, le temps de prendre une photo et de saluer le chaud soleil du printemps. Ce sont de gauche à droite, dans la première rangée: les Drs. C.L.B. Lavelle (Université du Manitoba), Martin J. Tyler (Université McGill), Barbara B. Harsanyi (Université Dalhousie), C. Mascrès, (Université de Montréal), H.M. Dick (Université de l'Alberta) et Vlastimil Brazant (Université de la Saskatchewan); dans la seconde rangée: les Drs David G. Gardner (Université de Western Ontario), John D. Spouge (Université de la Colombie-Britannique), J.H.P. Main (Université de Toronto), W.T. McGaw (Université de l'Alberta) et R.J. McComb (Université de Toronto); dans la troisième rangée: les Drs. Rénald R. Morency (Université Laval), R.M. Courtney (Université du Michigan) qui a pris part à la conférence en tant que représentant invité, Thomas McCrory (Université McGill), David Mock (Université de Toronto), qui agissait comme président de la conférence, et J.S. Ahing (Université de Manitoba).

Le 16 avril dernier a eu lieu au siège social de l'ADC, à Ottawa, une conférence sur l'enseignement de la pathologie buccale au niveau universitaire. Le Dr R.M. Courtney, président et professeur de pathologie buccale à l'Université du Michigan, a souligné, en tant que conférencier invité, le besoin d'étudier la méthodologie de l'enseignement et d'accorder à la pathologie buccale la place qui lui revient dans le programme d'enseignement dentaire.

Le Dr David Mock, membre de la Faculté de dentisterie de l'Université de Toronto et secrétaire-trésorier de l'Académie canadienne de pathologie buccale, a présidé la conférence qui était placée sous l'égide de l'ADC et de l'A.F.D.C.

À la suite de la conférence, on espérait pouvoir déterminer le programme d'études en pathologie buccale, tout en se conformant aux exigences de l'en-

seignement que l'ADC essaie d'établir, a déclaré le Dr Mock.

L'un des principaux problèmes que posent les membres enseignants des écoles dentaires est le fait que "la plupart d'entre eux n'ont pas reçu de formation professionnelle pour enseigner," le Dr Courtney a-t-il observé. Aussi espérait-il que la conférence fournirait quelques réponses pour mettre au point des méthodes d'enseignement, "surtout pour les cours à l'intention des non diplômés."

À son avis, les enseignants essaient d'imiter leurs anciens professeurs. "Je crois," a-t-il ajouté, "que nous devons faire quelques expériences, regarder autour de nous et essayer de trouver des méthodes qui nous conviennent et qui suscitent notre enthousiasme. Si nous nous ennuyons, les étudiants s'ennuient eux aussi."

En outre, a poursuivi le Dr Courtney, on doit avoir soin de situer l'en-

seignement de la pathologie buccale dans le programme d'études de manière à ce que les étudiants prennent intérêt à ce sujet et que celui-ci ne paraisse pas secondaire.

Ont participé à la conférence les Drs S. Ahing et C.S.B. Lavelle de l'Université du Manitoba, le Dr Vlastimil Bazant de l'Université de la Saskatchewan, les Drs H.M. Dick et W.T. McGaw de l'Université de l'Alberta, le Dr D.G. Gardner de l'Université de Western Ontario, le Dr B.B. Harsanyi de l'Université Dalhousie, les Drs J.H.P. Main et R.J. McComb de l'Université de Toronto, le Dr C. Mascrès de l'Université de Montréal, Les Drs Thomas P. McCrory et M. Tyler de l'Université McGill, le Dr J.D. Spouge de l'Université de la Colombie-Britannique, et le Dr Rénald R. Morency de l'Université Laval.

10% de plus en assurance du contenu pour vous protéger contre l'inflation

Le coût de l'équipement et de l'ameublement de bureau continue d'augmenter. Pour que vous restiez pleinement protégé, les assurances du contenu et des honoraires souscrites par l'intermédiaire du régime d'assurance des dentistes du Canada seront augmentées de 10 % le 1^{er} juillet 1982.

Cette augmentation vous est accordée sans que vous ayez à la demander.

La surprime vous sera facturée automatiquement. Si vous estimez ne pas avoir besoin de ce supplément, veuillez en aviser le CDSPI par écrit avant le 15 juin.

Sans que vous ayez quoi que ce soit à demander cette augmentation automatique compense certains des effets de l'inflation sur vos assurances. Elle constitue l'un des moyens par lesquels le régime d'assurance des dentistes du Canada s'efforce de vous faciliter la gestion de vos problèmes d'assurance... à des tarifs avantageux.

Revoyez vos garanties sans tarder

Même avec une augmentation de 10 % vous risquez d'être gravement sous-assuré, compte tenu du coût élevé des bâtiments, des améliorations et de l'équipement à l'heure actuelle. Revoyez vos garanties sans tarder. Si vous désirez les augmenter de plus de 10 % contactez le CDSPI.

Si vous n'êtes pas assuré par l'intermédiaire du régime d'assurance des dentistes veuillez lire ce qui suit :

Bien que le coût des assurances des biens augmente dans de nombreuses régions le régime d'assurance des dentistes du Canada a réussi à conserver les tarifs des assurances du contenu à un niveau stable depuis 1979, malgré l'augmentation constante du coût des sinistres. C'est peut-être le moment de comparer nos tarifs et nos garanties à ceux que vous avez actuellement. Pour tous renseignements appelez le 1.800.268.37.92 (961.71.17 à Toronto).



**Le régime
d'assurance
des dentistes
du Canada**

Régime parrainé par vos associations
nationale et provinciales et administré
par le
Canadian Dental Service Plans Inc.
Bureau 909, 2 Avenue St-Clair est
Toronto Ontario M4T 2W1

Les Actualités

En bref...

Un symposium sur la microbiologie buccale aura possiblement lieu le 7 juin, à l'Université Laval, de Québec, à l'occasion de la rencontre de la Société canadienne de microbiologie.

Les conférenciers prévus sont:

Le Dr B.C. McBride, de l'Université de Colombie-Britannique, qui traitera de l'adhérence et des colonies bactériennes de la bouche; le Dr I. Hamilton, de l'Université du Manitoba, qui traitera des divers systèmes de transport du sucre chez les mutants streptocoques se développant en culture; le Dr R.P. Ellen, de l'Université de Toronto, qui traitera de la bactérie Gram positive: son développement naturel et son rôle dans la carie et la périodontite; le Dr D. Mayrand, de l'Université Laval, qui parlera de l'anaérobiose Gram négative: son occurrence et ses possibilités pathogènes en périodontite; le Dr G. Bowden, de l'Université du Manitoba, qui traitera de l'analyse des antigènes bactériens de la bouche; le Dr C. Mouton, de l'Université Laval, qui traitera des humeurs des hôtes de la périodontie.

Le symposium s'adresse à toute personne intéressée; il n'y a pas de frais d'inscription.

Les denturologistes peuvent jouer un rôle précieux dans une équipe de santé dentaire, écrit le Dr R.R. Schiewe dans le numéro du mois de mars 1982 d'*Ontario Dentist*.

Citant sa propre réponse au ministre de la Santé concernant la controverse récente au sujet de la denturologie, le président de l'Association dentaire de l'Ontario précise que son organisme continue d'appuyer et d'encourager la formation des denturologistes qui doivent se joindre à l'équipe chargée des services de santé buccale. Il croit cependant que l'intégration des denturologistes ne sera pas entière

tant qu'on leur permettra de pratiquer de façon indépendante.

Suivant l'avis du conseil de la santé de l'Ontario, le ministre a rejeté récemment les recommandations du comité Dickens visant à modifier la loi actuelle sur la denturologie, permettant ainsi aux denturologistes d'offrir des services primaires au public.

Ceux-ci peuvent donc continuer d'offrir directement au public des dentiers supérieurs et inférieurs, faire de l'alignement et de la réparation, mais doivent travailler sous la surveillance d'un dentiste pour tout ce qui a trait aux partiels.

La faculté de médecine dentaire de l'Université de Colombie-Britannique est la première au monde à posséder un simulateur d'enseignement.

Une fois complété, l'appareil permettra de couvrir une variété de sujets, l'extraction chirurgicale des dents incluses, l'endodontie, les techniques d'anesthésie locale, la parodontologie, les techniques opératoires et la pédodontie.

Jusqu'ici, le modèle permet d'enseigner les opérations ordinaires ainsi que l'installation des couronnes et des ponts, de noter le Dr Beagrie, doyen de la faculté de médecine dentaire de l'UBC, dans le bulletin de la faculté.

L'appareil a été acheté grâce à une subvention de la Woodward Foundation.

On apprend par un bulletin de la *Canadian Society of Public Health Dentists* que des services d'hygiène publique seront établis à Terre-Neuve afin de coordonner les opérations ayant trait à l'hygiène communautaire sur une base régionale. Chaque service se composera d'un administrateur principal qui agira comme directeur

de santé régional, d'infirmières publiques, d'inspecteurs d'hygiène publique, d'un nutritionniste, d'un hygiéniste dentaire et d'un éducateur en matière de santé.

En Ontario, on est en train de rédiger des directives pour la première phase des programmes de prévention dentaire. Cette phase comprend le programme de fluoruration ainsi que des cours de santé dentaire et d'hygiène buccale. On prévoit que les 43 services de santé locaux appliqueront ces programmes en 1982.

En Colombie-Britannique l'an dernier, des hygiénistes et des assistants dentaires ont donné des cours d'hygiène buccale et de prévention dentaire à presque 90 000 élèves au niveau primaire. De ce nombre, presque 60 000 ont traité leurs dents au fluor et 79 000 ont reçu un examen dentaire.

Les brochures et dépliants de l'ADC atteignent un record de popularité avec un tirage global de plus de 475 000 exemplaires au cours des douze derniers mois, une augmentation de plus de 100 000 par rapport à l'année précédente.

Cet accroissement de la diffusion se reflète également dans une augmentation de plus de 25 pour 100 de la demande de la part du public comme de la profession dentaire. On a ainsi distribué 477 239 plaquettes, dont 399 426 de langue anglaise.

Facts Favour Fluoridation a été la plaquette la plus populaire avec 89 commandes pour 38 066 exemplaires. Suivent de près, *Do You Have Periodontal Disease?* (34 670 exemplaires), *Dangerous in Bed/Menace pendant le sommeil* (dépliant bilingue, 32 670 exemplaires), *Do it Yourself Oral Hygiene* (32 096) et *Eating Properly for Better Dental Health* (22 726).

En français, le feuillet le plus populaire a été *Souffrez-vous de périodon-*

ite ? avec 16 627 exemplaires, suivi de *La santé dentaire grâce à une bonne alimentation* (10 154 exemplaires). Ont aussi été fort en demande, *Sauvez vos dents — attaquez-vous à la racine du mal* (6 467 exemplaires), *Précautions à prendre après une chirurgie buccale mineure* (5 289) et *Vous fumez ? Faites-vous examiner la bouche* (4 839).

Les deux publications les plus récentes, *Vous fumez ? Faites-vous examiner la bouche* et *Pratiques d'hygiène pour garder une bouche saine*, édités à l'automne, ont aussi eu un succès digne de mention. En quelque six mois, ces deux publications ont fait l'objet de 389 commandes pour 49 286 exemplaires en anglais et de 50 commandes pour 8 090 exemplaires en français.

Le Service des communications de l'ADC travaille actuellement à la production de trois autres feuillets traitant des prothèses entières et partielles ainsi que des troubles du joint temporomandibulaire.

Le Dr Ralph Brooke, président du département de médecine buccale à l'Université Western Ontario, vient d'être nommé doyen de la faculté de médecine dentaire de la même institution.

Il assumera ses nouvelles fonctions le 1^{er} juillet pour un mandat de sept ans, succédant ainsi au Dr Wesley Dunn qui occupe le poste depuis 1965.

Diplômé en dentisterie en 1957 de l'Université Leeds et en médecine en 1962, le Dr Brooke est fellow du Collège royal des chirurgiens d'Angleterre et du Collège royal des dentistes du Canada. Il est président sortant de l'Académie canadienne de pathologie buccale.

Ontario Dentist, organe, mensuel de l'Association dentaire de l'Ontario, a un nouveau rédacteur-en-chef.

Il s'agit du Dr David Kenny, diplômé en médecine dentaire de l'université Western Ontario en 1970, en pédodontie de l'Université de Toronto en 1973, où il obtint également un Ph. D. en 1976. Le Dr Kenny a assumé ses nouvelles fonctions au mois de décembre. Il a été chef du département de la dentisterie à l'hôpital pédiatrique de l'Est de l'Ontario, à Ottawa, de 1977 à 1981, avant de devenir dentiste-en-chef à l'hôpital des enfants malades de Toronto et professeur associé au département de pédodontie à l'Université de Toronto.

Le Dr Kenny succède au Dr Marvin Klotz qui a donné au journal l'élan d'un véritable magazine à l'intention des membres de l'association provinciale. Sa contribution à l'avancement de la profession lui a valu de recevoir une toile du Dr John Palmer.

Le ministère fédéral de la Santé et du Bien-être vient de rééditer le guide d'alimentation du Canada.

La nouvelle édition, qui veut aider les Canadiens à bien choisir leurs aliments en fonction de leurs besoins en nutrition et en énergie, est presque semblable à la précédente quant au style et à la présentation. Elle en diffère cependant par l'intégration de ses recommandations sur la valeur nutritive des aliments, l'utilisation du système métrique, les modifications apportées au nom des deux groupes d'aliments pour souligner la variété des produits accessibles, ainsi que des modifications dans chacun des groupes.

Le guide alimentaire, qui faisait partie en 1982 du dossier du Mois national de la santé dentaire de l'ADC, est toujours largement utilisé pour l'enseignement de la santé et la mise en oeuvre de programmes connexes au Canada.

Pour obtenir de plus amples renseignements, il suffit de s'adresser au Service des programmes de nutrition, Direction de la promotion de la santé, Direction générale des services et de la promotion de la santé, Ottawa (Ontario), K1A 1B4.

Le Fonds américain pour la santé dentaire demande aux intéressés qui désirent toucher des subventions en 1983, de lui soumettre leur projets de recherche et leurs projets spéciaux.

Le Fonds s'intéresse particulièrement aux projets ayant trait à la disponibilité des soins dentaires, à la garantie de leur bonne qualité, à la prévention des maladies dentaires et à l'amélioration des méthodes pédagogiques en dentisterie.

Les institutions, les organisations et les particuliers ont jusqu'au 1^{er} juin 1982 pour soumettre leurs demandes. Les lauréats seront annoncés en décembre et les subventions peuvent être accordées pour une période allant jusqu'à trois ans. Pour de plus amples renseignements, veuillez communiquer avec le directeur des programmes à l'adresse suivante: American Fund for Dental Health, 211 East Chicago Avenue, Chicago, Illinois 60611.

L'International Journal of Periodontics and Restorative Dentistry a remporté deux prix pour la qualité de ses textes et de sa présentation graphique. Le Collège international des dentistes lui a décerné le *Golden Pencil Award* pour la façon inventive dont il utilise les illustrations et les graphiques, et l'*Association of American Publishers* lui a octroyé un prix d'excellence pour la mise en page et la présentation.

En 1980, le Collège international des dentistes a décerné le *Golden Pencil Certificate of Merit* au Journal

de l'Association dentaire canadienne pour sa disposition typographique originale et ses illustrations.

L'Association dentaire britannique projette de tenir son 102^e congrès scientifique annuel du 2 au 5 juin à Brighton (Angleterre).

L'ordre-du-jour prévoit des cliniques sur les tendances actuelles de la dentisterie restaurative et de la chirurgie pré-prothétique, le fonctionnement et le mal fonctionnement du joint temporomandibulaire, la santé du dentiste, les malformations buccales et maxillofaciales ainsi que les applications de l'informatique à la pratique

dentaire. Parmi les conférenciers invités, on note le Dr C. Molin, de Suède, qui traitera du traitement du joint temporomandibulaire et de ses aspects psychologiques, ainsi que le Dr W. Barlow, qui traitera des douleurs dues à la posture du dos et du cou.

Le programme prévoit aussi la réception et le déjeuner du président, le dîner annuel, le déjeuner de la FDI, un tournoi de golf et des activités pour les dames.

On prévoit que l'exposition dentaire internationale 1982 qui se tiendra du 9 au 13 juin, au pavillon n° 7, dans le cadre de l'Exposition commerciale in-

ternationale de Milan attirera 25 000 professionnels.

L'exposition est un événement dentaire important en Europe. Elle couvrira neuf domaines, y compris les matériaux de consommation pour la dentisterie et la technologie dentaire, l'équipement utilisé en médecine dentaire, les produits pharmaceutiques, les produits pour les laboratoires où l'on fabrique des prothèses dentaires, les alliages précieux utilisés en dentisterie, ainsi que les disciplines techniques et scientifiques spécialisées qui appuient la dentisterie.

L'exposition est placée sous l'égide de la Fédération de l'industrie dentaire en Europe.

Un régime d'assurance pour dentiste

Voici le premier d'une série d'articles portant sur les caractéristiques et les modalités du régime d'assurance des dentistes du Canada.

Caractéristiques et modalités du contrat

Assurance-vie de base:

Couverture maximale accessible, 370 000 \$. L'assurance temporaire offerte en vertu du régime est maintenue par niveaux ou convertie, jusqu'à l'âge de 80 ans. Le régime actuel comprend une formule de réduction à l'âge de 65 ans.

Voici comment s'applique cette formule pour un dentiste qui détient une police d'assurance-vie de 200 000 \$.

Jusqu'à 200 000 \$
65 ans

De 65 à 69 ans Réduction de 50% ou une somme maximale de 121 000 \$ (pour le cas cité en exemple, l'assurance est réduite à 100 000 \$)

De 70 à 74 ans Réduction de 50% ou une somme maximale de

31 000 \$ (pour le cas cité en exemple, l'assurance est réduite à 31 000 \$)

De 75 à 80 ans Réduction de 50% ou une somme maximale de 13 000 \$ (pour le cas cité en exemple, l'assurance est réduite à 13 000 \$)

À 80 ans L'assurance cesse

À chaque point de réduction, 65, 70 ou 75 ans, l'assuré peut convertir en tout ou en partie la somme retranchée.

Les assurés doivent savoir que la police d'assurance-vie émise par l'Impériale est cessible. Le régime d'assurance-vie est conçu pour émettre une police plutôt qu'un certificat d'assurance comme cela se fait ordinairement, ce qu'ignorent beaucoup de gérants de banque. Le fait de pouvoir utiliser en nantissement les polices d'assurance-vie du Régime d'assurance des dentistes du Canada offre au dentiste un avantage marqué.

À ceux qui veulent plus de 100 000 \$

d'assurance-vie, on suggère de demander plusieurs polices pour en assurer la couverture. Ainsi, par exemple, une assurance de 150 000 \$ peut faire l'objet de trois polices de 50 000 \$ chacune, ou encore une couverture de 100 000 \$ peut être répartie en deux polices de 25 000 \$ et une de 50 000 \$. Ceci donne de la souplesse au régime — pourquoi placer une police de 100 000 \$ en nantissement à la banque si l'emprunt n'est que de 25 000 \$? En outre, il se peut qu'avec les ans on n'ait pas besoin d'autant d'assurance-vie; il est alors possible de réduire la couverture en annulant une police de 25 000 \$ ou de 50 000 \$.

Le régime d'assurance-vie veut satisfaire aux besoins des dentistes. Économique et souple, il répond à la demande du marché.

Il est indispensable que les présidents provinciaux du régime en connaissent bien toutes les caractéristiques. S'il vous faut des renseignements supplémentaires, téléphonez au C.D.S.P.I.

Le gaz hilarant, c'est sérieux!

Communément appelé "gaz hilarant" depuis qu'on l'a utilisé à des fins de divertissement au début du XIX^e siècle, le protoxyde d'azote ne prête guère à rire aujourd'hui.

Le protoxyde d'azote, un anesthésique gazeux utilisé par les médecins et les dentistes depuis presque un siècle, a récemment fait l'objet d'études. Bien que les professions médicales ne mettent pas en doute ses propriétés thérapeutiques et considèrent qu'il est sûr pour les patients, on se pose des questions quant aux effets qu'il exerce sur l'environnement et le milieu de travail.

Santé et Bien-être social Canada, dans une lettre (Alerte — n° 46 adressée aux dentistes le 15 février dernier, indique qu'une exposition chronique au protoxyde d'azote peut représenter un risque important pour le personnel dentaire.

En deux mois, il s'agit du deuxième avis émanant du Bureau des instruments médicaux et touchant l'hygiène dans les milieux de santé. Une lettre datée du 8 janvier mettait en garde contre l'oxyde éthylénique à cause de ses propriétés carcinogènes. Ce gaz est un stérilisant commun dont l'utilité est restreinte dans le cabinet dentaire.

Les deux avis rappellent que, si surprenant que cela puisse paraître, le Bureau des instruments médicaux fait partie de la Direction de l'hygiène du milieu. Ses opérations sont indépendantes des autres bureaux qui sont chargés de veiller, à l'échelle nationale, à la sûreté et à l'efficacité des thérapeutiques comme celles qui ont recours aux drogues ou aux produits biologiques.

En faisant des recherches sur le protoxyde d'azote et sur les usages qu'en font les dentistes, l'Association dentaire américaine a découvert qu'une exposition chronique à ce gaz peut présenter des dangers sérieux pour le personnel dentaire. Les torts causés peuvent varier des maladies du foie et des désordres neurologiques aux

complications pendant une grossesse.

Suivant les résultats d'une enquête publiés dans le numéro de juillet 1980 du Journal de l'Association dentaire américaine, "une exposition prolongée (ou répétée dans le milieu de travail) à des traces d'anesthésique dans le cabinet dentaire peut être associée à des problèmes de santé généraux plus grands."

Des études et des recherches indépendantes, entreprises au nom du Bureau des instruments médicaux de Santé et Bien-être social Canada, démontrent que le protoxyde d'azote pose un risque plus grand pour le personnel dentaire que pour le personnel médical.

Compte tenu des quantités absolues, les hôpitaux utilisent "beaucoup plus" de protoxyde d'azote que les dentistes, a déclaré le Dr A.K. Das-Gupta, directeur du Bureau des instruments médicaux. Cependant, a ajouté le Dr David Johnson, les dentistes ont l'habitude "d'utiliser ce gaz de façon presque exclusive alors que les hôpitaux ont recours à plus d'une sorte d'anesthésique."

Le Dr Johnson est le chef de la Division d'évaluation et de recherche au Bureau des instruments médicaux et il est chargé de recueillir des données techniques sur l'équipement anesthésique qu'utilisent médecins et dentistes. Selon lui, le Bureau des instruments médicaux "s'est rendu compte il y a quelque temps des risques qu'entraîne une exposition au protoxyde d'azote, mais au début, il s'inquiétait davantage des dangers qui existaient dans les salles d'examen chirurgical (des hôpitaux)." C'est seulement sur la demande de plusieurs dentistes que le Bureau a décidé d'étudier de près ce problème dans les cabinets dentaires.

Les enquêtes suivantes ont eu tendance à montrer que "les effets du protoxyde d'azote sur le personnel dentaire se voient de façon plus précise" parce que les dentistes utilisent

rarement une autre sorte d'anesthésique, a commenté de Dr Johnson. En outre, comme plusieurs d'entre eux n'utilisent pas ce gaz autant que les hôpitaux, ils sont moins disposés à installer un équipement coûteux pour réduire le taux de gaz dans le milieu.

"Quand vous utilisez beaucoup de protoxyde d'azote, a expliqué le Dr DasGupta, vous prenez des précautions. Quand vous en utilisez peu, vous ne prenez aucune précaution."

Signée par le Sous-ministre suppléant, Monsieur A.J. Liston, la lettre du 15 février 1982 a été envoyée à tous les dentistes du Canada et met en garde contre les taux de protoxyde d'azote élevés émanant des appareils anesthésiques dentaires.

Le bulletin spécial recommande aux dentistes d'utiliser des appareils d'épuration pour les gaz, d'installer un bon système de ventilation, de converser le moins possible avec le patient pendant le traitement (un patient qui aspire le gaz l'expire ensuite), d'améliorer le système général de ventilation dans la salle d'opération et de vérifier régulièrement l'équipement servant à administrer le protoxyde d'azote.

Ces recommandations font suite à une étude préliminaire faite au cours des 18 derniers mois à l'Université de la Colombie-Britannique par le Dr David Donaldson, professeur adjoint de dentisterie restaurative. Cette étude avait pour but de déterminer quels sont, parmi les appareils d'épuration pour les gaz présentement disponibles sur le marché canadien, ceux qui peuvent réduire les taux de protoxyde d'azote au-dessous du taux de 50 parties par million recommandé par l'*Institute for Occupational Safety and Health*. L'étude a été faite en vertu d'un contrat passé par le Bureau des instruments médicaux.

Bien que les quatre appareils présentent des différences observables sur le plan de l'efficacité, a déclaré le Dr Johnson, chacun réduit le taux de

(Suite à la page 320)

Le partage des frais de bureau

Parce que les frais généraux d'administration augmentent sans cesse, les dentistes cherchent de nouvelles solutions pour restreindre le plus possible les dépenses de leur cabinet.

Pour le praticien privé, la solution recommandée est de partager les frais généraux avec un ou plusieurs collègues. Voici deux cas à titre d'exemple.

Partage limité

Dans ce premier cas, chaque dentiste d'un même cabinet dispose de ses salles d'opération, mais partage avec les autres diverses pièces comme la salle d'attente, le laboratoire, la salle du personnel, le bureau privé, etc.

Bien que la plupart des dentistes préfèrent avoir leur propre cabinet, on remarque que les plus occupés utilisent rarement leur bureau privé. Par contre, il existe un cabinet collectif dans lequel plusieurs dentistes ont chacun leur pupitre et leurs dossiers dans la même pièce, ce qui rappelle un peu la salle des nouvelles d'un journal. Cette solution épargne de l'espace et donne de bons résultats.

Les services du personnel peuvent facilement être partagés et leurs salaires acquittés par plus d'un dentiste. Une bonne réceptionniste peut aisément s'occuper des rendez-vous et du règlement des honoraires pour deux dentistes. Il n'est pas difficile de partager les frais d'une assistante sup-

plémentaire qui travaillera soit dans les salles d'opération, dans le laboratoire ou à la réception, soit dans ces trois endroits à la fois. De la même façon, on peut partager les services d'une hygiéniste, d'une secrétaire ou d'un comptable.

Par ailleurs, il est possible de réaliser des économies en achetant des matériaux dentaires en bloc. Toutefois, parce que la plupart des dentistes tiennent fermement à certains matériaux plutôt qu'à d'autres, il n'est pas toujours économique d'acheter en quantité double. C'est seulement en s'entendant au préalable avec un collègue sur le choix d'un matériau que l'on peut espérer un meilleur prix. Cependant, même s'il n'y a pas accord à ce sujet, on peut toujours partager les frais d'inventaire.

Ce genre de partage n'empêche personne de déterminer ses propres honoraires et plans de traitement. De plus, il offre un avantage supplémentaire: quand un dentiste est malade, ses collègues peuvent s'occuper de ses clients qui ont des problèmes urgents et superviser légalement le travail de son hygiéniste ou de l'hygiéniste qu'ils partagent.

Partage complet

Dans ce deuxième cas, deux dentistes ont chacun leur propre clientèle, mais utilisent les mêmes salles d'opération.

Habituellement, l'un des dentistes et son personnel au complet (y compris la réceptionniste) travaillent du lundi au mercredi, tandis que l'autre dentiste et son personnel travaillent du jeudi au samedi. Chaque mois, les équipes échangent leurs jours de travail afin de permettre à tous de profiter des fins de semaine à tour de rôle.

Les principales économies réalisées dans ce cas portent sur le loyer, les services publics et l'équipement dentaire. Et certes, pour ces dentistes, il est également possible d'épargner sur le coût des matériaux.

Pour le personnel, le fait de travailler seulement trois jours par semaine représente un avantage précieux et plusieurs ne veulent plus d'une semaine de travail de cinq jours. En disposant de quatre jours de congé par semaine, disent-ils, le fait de travailler de 30 à 36 heures pendant trois jours ne constitue aucun problème. À leur avis, ils sont plus productifs par heure de cette façon que s'ils travaillaient cinq jours par semaine. Autre avantage personnel important pour ces gens, c'est la chance qu'un long congé hebdomadaire leur donne de se consacrer à leur vie privée.

Enfin, comme dans le premier cas, un dentiste peut se charger des urgences pendant que son collègue est en congé.

*Par le Dr S.R. MacLeod,
président du Conseil éditorial*

Le gaz hilarant (suite)

gaz à un niveau de concentration acceptable lorsqu'il fonctionne dans des conditions idéales. De façon générale, a-t-il ajouté, les appareils sont conformes aux revendications des fabricants.

Il appartient aux dentistes, a souligné le Dr Johnson, de déterminer si les prochaines recherches sur les ap-

pareils d'épuration pour les gaz et sur leur efficacité à réduire le taux du protoxyde d'azote dans le milieu doivent constituer "une priorité ou une urgence."

Quant au Dr DasGupta, il a précisé que la lettre du 15 février avait été envoyée à titre d'avis et non de règlement. Il espère qu'elle incitera les den-

tistes à installer dans leur cabinet des appareils d'épuration appropriés. Mieux vaut un appareil même peu efficace que rien du tout, a-t-il dit.

De l'avis du Dr Johnson, seulement "une faible partie" des dentistes canadiens qui utilisent toujours du protoxyde d'azote possèdent des appareils d'épuration pour les gaz.

Un dentiste canadien au Botswana

Je suis arrivé au Botswana, avec ma famille, au mois d'août 1980. Volontaire du Service universitaire canadien outre-mer (SUOCO), je me suis installé à Francistown à titre d'agent régional des services dentaires.

Le Botswana est un pays d'Afrique méridionale, sans accès à la mer, entouré de la Namibie, du Zimbabwe et de la République d'Afrique-du-Sud. Le désert de Kalahari occupe les deux tiers du pays et le reste du territoire est chaud, sec et poussiéreux, sauf pendant la brève saison des pluies qui va du mois de décembre au mois de février.

Les quelque 800 000 habitants du pays vivent principalement de l'élevage, de la culture et de l'industrie minière. Les habitudes de vie et d'alimentation, de même que les traditions et la structure familiale, changent rapidement au Botswana, à mesure que les gens du pays adoptent de bien des façons et subtilement les valeurs occidentales.

Le pays consomme trois à quatre fois plus de sucre que la moyenne du continent africain. Les importations de cette seule denrée ont augmenté de 69 p. 100 entre 1974 et 1979. Des études menées au cours des dix dernières années font voir une augmentation spectaculaire de la prévalence de la carie dentaire chez les enfants du niveau primaire. Les données DMF de 1978 indiquent bien la tendance: elles étaient supérieures en moyenne chez le groupe des 15 à 19 ans (1, 7) à celles du groupe des 20 à 24 ans (0,8). Il en va de même des observations faites en clinique: s'il est encore courant de voir des sexagénaires avec leurs 32 dents en parfait état, on en verra de moins en moins au fur et à mesure qu'augmente la prévalence de la carie chez les élèves du niveau primaire. Bientôt, ce sera chose du passé.

Ordinairement, ce sont les enfants des milieux socio-économiques défavorisés qui présentent le plus grand

nombre de caries. Au Botswana, c'est cependant le contraire qui se produit. Le régime alimentaire du milieu rural ne favorise pas le développement de la carie, qui y est faible comparativement aux éléments des groupes sociaux plus élevés qui ont une alimentation plus raffinée.

Les services dentaires du pays comptent actuellement quatre dentistes. Le programme de formation des thérapeutes dentaires a commencé en 1975 et, en peu de temps, l'institution était saturée. On a aussitôt entrepris d'agrandir l'école et les travaux devaient se terminer au début de 1982. Cette expansion doit permettre de diplômer cinq thérapeutes par année, au terme d'un programme d'études de deux ans et demi. La formation qu'il reçoit permet au thérapeute diplômé de mettre en oeuvre des programmes élémentaires de prévention et de dispenser des services élémentaires de restauration et de chirurgie sous la surveillance du dentiste.

Varié, plein de surprises et de satisfactions, le rôle du dentiste régional est une véritable gageure. Un des aspects les plus satisfaisants du poste, c'est de pouvoir consacrer ses efforts à la prévention, de susciter toutes les occasions possibles de parler aux parents, aux enseignants, aux étudiants et aux travailleurs de la santé, tout en s'adonnant à la médecine dentaire,

extractions de routine, travail à l'hôpital, gestion et administration de la clinique.

Cette année, Michael Ojoleck, étudiant de troisième année à l'Université Dalhousie, a passé ses vacances d'été au Botswana, à titre de volontaire de notre service. Pendant les sept semaines qu'il a passées à Francistown, il a participé à des conférences scolaires et fait des examens dans les écoles, en plus d'assister aux interventions et à la chirurgie buccale, à l'hôpital ou à la clinique. Il espère se servir de l'expérience et de l'information qu'il a acquises pour faire, selon son choix, un travail sur l'importance de la médecine dentaire préventive dans les pays en voie de développement.

Participer à la création d'un programme de soins dentaires dans un pays qui connaît des changements rapides dans ses coutumes, son alimentation et ses attitudes en ce qui a trait à la santé, c'est un défi passionnant. Pour un dentiste nord-américain, c'est aussi une expérience précieuse pour l'avenir.

L'auteur, le Dr A.L. Nette, remercie le secrétaire permanent du Ministère de la santé, le directeur des Services dentaires ainsi que le SUOCO Botswana qui l'ont aidé et lui ont permis d'utiliser l'information présentée dans l'article ci-dessus.

Régime d'épargne-retraite de l'ADC

Les valeurs respectives du Régime d'épargne-retraite de l'Association Dentaire Canadienne étaient les suivantes au 28 mars 1982.

Fonds d'actions ordinaires	\$48.2710
Fonds à revenu fixe	\$27.1051
Fonds garanti	\$22.7908
Fonds de placement	\$11.0596
L'avoir total (valeur marchande) du régime s'élevait à	\$29,963,929.00

Au 28 février 1982, les chiffres du mois précédent étaient les suivants:

Fonds d'actions ordinaires	\$48.9979
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Fonds à revenu fixe	\$26.6661
Fonds garanti équilibré	\$22.5200
	\$11.4066

L'avoir total (valeur marchande) du régime s'élevait à \$30,363,510.00

Pour de plus amples renseignements, veuillez écrire à l'adresse suivante: Canadian Dental Service Plans Inc., 2 St. Clair Ave. E., Toronto, Ontario, M4T 2W1, ou appeler le service de renseignements du CDSPI en composant 1-800-268-3792 (961-7117 pour les résidents de Toronto).

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Oral Manifestations of Systemic Disease

Jones, Mason

*The W.B. Saunders Co., Ltd.,
Toronto, 1980, Price: \$61.85,
Length: 559 pages.*

This book is intended to provide information about the oral signs of systemic disease. According to the editors "it is intended for clinicians whose patients have problems relating to the mouth."

The text is divided into 19 chapters, and the material is presented according to the various systems or pathogenetic mechanisms involved.

Chapter 2 is devoted to single

gene disorders and contains a classification of these anomalies according to the oral structures involved i.e., lips, bone, teeth, etc... This serves as a useful clinical reference.

Chapter 5 deals with the oral manifestations of internal malignancy. As the authors point out, there is often difficulty in establishing a correct diagnosis when dealing with patients who present with vague symptoms such as preauricular pain, numbness or trismus, caused by malignant tumors. They quote a time lapse of 14 months between the first symptom and the final diagnosis.

Other subjects dealt with in this book are: connective tissue disorders, nutritional disorders, diseases of the gastrointestinal tract, cardiovascular and renal disease and psychiatric disorders.

The book is well-written and covers many of the subjects covered in the standard texts on internal medicine but with a dental orientation. It is easy to read and makes an excellent reference book for the busy practitioner.

This book was reviewed by W.B. Donohue, Associate professor, Division of Pathology, Faculty of Dental Medicine, University of Montreal.

Pain and Anxiety Control in Dentistry

Edited by Stanley R. Spiro

376 pages

This textbook should not be mistaken for the original publication "Amnesia — Analgesia Techniques in Dentistry" by the same author. This endeavour is far more comprehensive, as would be expected with 25 contributors and six consultants combining for its production. Such a consortium of experts provides both the strength and weakness of the book.

A large spectrum of pain and anxiety control is indeed covered in its 376 pages, but the subject matter is dealt with in varying degrees of thoroughness. Although divided into 11 sections, there is often repetition in such areas as patient evaluation, pharmacology and emergency procedures. Rather than a drawback, however, this may be regarded as a positive attribute by re-emphasizing these important areas.

There are many fine chapters with extensive references. The chapter describing the psychological and physiological facets of anxiety and pain is an example of how such a publication can be useful to the practising dentist. It describes clearly and concisely the state of the art in this area and provides a comprehensive and relevant list of references.

There are other chapters, namely those discussing the pharmacology and therapeutics of drugs, which fulfil a similar need. However, some subjects do not lend themselves to such summarizing and are probably more appropriately described in "specialized" texts. This is demonstrated in the description of the diagnosis and management of organic pain problems where the overview is necessarily superficial with discussion of but a few syndromes.

The chapter on acupuncture is informative in what it states, but could be improved by describing the overall field of stimulation-produced analgesia and by dis-

cussing other possible mechanisms of its effect in addition to the brief mention of endorphins.

Local anaesthetic techniques are described simply and efficiently, utilizing the best photographic illustrations in the text. The omission of the Gow Gates technique, thought by some to be the greatest advancement in local anaesthesia this decade is, therefore, surprising.

One must remember, however, that deficits of this kind are bound to be found in such an ambitious publication. Indeed, the book has been described aptly as "superficially comprehensive" by one reviewer. If one can accept this fact and allow some flexibility for the written and illustrative variabilities from one chapter to the next, then "Pain and Anxiety Control in Dentistry" is an informative overview and reference text for the dental practitioner.

This book was reviewed by David Donaldson, BDS, FDS, RCS, MDS, Associate Professor, Dept. of Restorative Dentistry, The University of B.C.

Publications

Dental Treatment Planning for the Adult Patient

Laurence I. Barsh, B.A.,

The author of this text has set about to assist general dental practitioners develop a method of comprehensive treatment planning for their patients.

It is proposed that such treatment planning should be simple and effective, and yet provide the dentists with a variety of choices to suit the particular needs of their individual patients. The first chapter, which outlines the development of a comprehensive approach to treatment planning and the second chapter on the collection of data are well done, and provide an excellent review of these basic procedures. However, in the third chapter on the organization of dental findings one senses the difficulty of the task that the author has set for himself.

It is here that one first notices that the text does not flow smoothly, but rather begins to become simply a catalogue of patient problems. Unfortunately, and probably due to lack of space, much important material is dealt with in a very superficial manner. As a result the reader is not led to make a formal diagnosis for the patient upon which basis a treatment plan must be formulated; but instead is presented with the problems that occur within the various dental disciplines.

The approach that follows is to collect diagnostic material on a problem-oriented record, listing historical, clinical and radiographic findings and developing a problem list for them. The treatment planning it seems, translates into dealing with this problem list. The various records that are included in the text, and the record-keeping procedures that seem to be advocated by the author are so complex and appear to be so time-consuming that one feels that the average general practitioner would be totally discouraged in collecting and utilizing clinical

information in the manner suggested.

If one hopes to stimulate general practitioners to conduct proper examinations and develop comprehensive treatment plans for their patients it would seem mandatory that record gathering and record-keeping procedures be kept as simple and concise as possible.

As the author progresses he presents his views on treatment plans — both ideal and alternative — and reviews some actual cases. Although the material is readable one wonders whether or not the space devoted to the subject is justified for, as the author states "Confronted with identical dental problems, two doctors who possess different abilities may well develop dissimilar treatment plans and yet both obtain excellent results." Perhaps it would have been more stimulating to have approached the problem at hand

in a less specific fashion.

The final chapter on the inter-relationship of treatment planning and third party plans, whilst possibly useful for practitioners in the United States, does not appear to be germane for Canadian dentists who have been provided with some of the most highly developed technical manuals on this subject.

In his preface the author states: — "It is both extremely easy and extremely difficult to write a text of this sort. This is due to the absence of previous books treating the subject in the manner attempted herein. It is difficult because there is no starting point, and easy because there is nothing with which to compare results." He is to be congratulated on having made the effort but it would appear that the task was more difficult than he anticipated.

This book was reviewed by Dr. James Sim, St. Catharines, Ontario.

Craniofacial Embryology

Third Edition (Dental Practitioner Handbook Number 15)

G.H. Sperber,

B.Sc., B.D.S., M.S., Ph.D.

*Professor of Oral Biology,
Faculty of Dentistry,
University of Alberta, Edmonton
Wright P.S.G., Bristol; Littleton, Mass.
Softbound Book,
220 pages, \$24.50,
Publication Date: August 1981*

This excellent little volume represents the third edition of a book which only made its first appearance seven years ago. It has been updated because of the large amount of new information that has become available in the field of craniofacial biology. The aim of the book is to facilitate the comprehension of normal craniofacial anatomy and its development defects in a succinct manner, and the author has succeeded admirably in doing this.

The book is appropriate for dental students, dental hygiene students, medical students, speech pathologists, various surgical subspecialists whose respective provinces include the head and neck, orthodontic graduate students, and anyone else with an interest in craniofacial embryology.

Instructors should find this volume especially useful because of its well balanced overview of the subject. It allows the teacher the flexibility of delving more deeply into some areas, sacrificing depth in other areas, and even disagreeing with some ideas at certain points in still other areas. If more dental books were written as selectively as this one is, our teaching job would be much easier.

This book was reviewed by Dr. M.M. Cohen, Jr., Professor of Oral Pathology, Faculty of Dentistry, Professor of Pediatrics, Faculty of Medicine, Dalhousie University, Halifax, N.S.

Pharmacology and Therapeutics for Dentistry

*Enid A. Neidle,
Donald C. Kroeger
and John A. Yagiela*

*C.V. Mosby Company, St. Louis,
Toronto, London, 1980
749 pages, \$37.25*

Written by 27 contributors, this book provides the dentist with a thorough understanding of the principles of drug action and of the pharmacology of all the major classes of drugs.

Certain sections — for instance the one on local anesthetics — have been given fuller treatment than is provided in medical pharmacology texts because the dentist makes extensive and special use of these drugs. Several topics of unique interest to dentistry, such as anticaries and antiplaque agents, have been included.

The chapter on inflammation contains dental examples and applications. The chapter on antineoplastic drugs includes a section on the stomatotoxicity of these agents. The chapters on antibiotics tell which antibiotics would be appropriate for a periapical abscess, acute necrotizing ulcerative gingivitis, and acute suppurative pulpitis.

In every chapter where it is appropriate, sections have been included describing the dental use of the class of drugs, the special implications of these drugs for dentistry, and contraindications to their use.

Some comments. Drug interactions are discussed in a general chapter and in many of the individual chapters. Perhaps lacking is a clear summary, as published in the Medical Letter on Drugs and Therapeutics, vol. 19, p. 5, 1977,

and vol. 23, p. 17, 1981, adapted to the needs of the dentist.

The chapter on local anesthetics might give more space to each individual drug and include maximum dose for children and maximum number of ampoules for children and adults. Bupivacaine is now available in cartridge form. Though illegal in the United States, the preservative methylparaben is still used in Canada. The two chapters on narcotic and nonnarcotic analgesics could perhaps be combined to avoid redundancies.

A table comparing potencies of all these agents as useful in mild, moderate or severe pain would be a welcome addition. An area not fully described is the pharmacological control of anxiety in children. Perhaps further editions will spend more time on pediatric pharmacology.

Some minor points. The efficacy of sulfinpyrazone as an anticoagulant (p.74) is controversial. R is the receptor, not the regulatory subunit of the enzyme system (fig. 5-6). Cyclic AMP is not involved in all responses of the brain to dopamine (p. 118). "Terbutaline and metaproterenol... (are) not yet approved for use in the United States" (p. 128); "terbutaline and metaproterenol have been approved for use in the United States" (p. 135). "While the amphetamines... produce anorexia, their use is accompanied by amphetamine-like effects" (p. 135). The nonspecific action of high doses of propranolol on myocardial membranes is not "sometimes mistakenly referred to as a quinidine-like action" (p. 146). The therapeutic effect of propranolol in treating cardiac arrhythmias is entirely (not mainly) due to its B-adrenergic blocking action (p. 146).

It is difficult to accept the statement (p. 147) that the half-life of

propranolol is four to six hours after oral administration and one and one-half to two hours after intravenous administration. Methyldopa was originally studied as an inhibitor of norepinephrine synthesis, not histamine synthesis (p. 153). Methyldopa and clonidine do not reduce blood pressure "through a decreased cardiac output by a combination of slowing the heart rate and reducing venous return" (p. 154). Cholinergic drugs shorten refractory period in atrial, but not (the entire) heart muscle (p. 163).

The headings of fig. 11-2 (p. 190) are reversed. Gallamine is known to "possess an atropine-like action confined to the muscarinic receptors of the sinoatrial node" (p. 192). Caffeine causes central vasoconstriction in addition to peripheral vasodilatation (p. 242). What is 1.0 μ /cc (fig. 24-2)? Cardiac glycosides constrict peripheral blood vessels directly; augmentation of sympathetic outflow from the CNS causes only minimal change in arterial resistance (p. 398). Bretylium does not have an effect on conduction or responsiveness of the heart (p. 423). The initial dose of erythromycin is 500 mg, not 1 gm (table 35-7). Chlorhexidine is not a bisphenol derivative (p. 660).

We quote from the book's preface: it is "a standard, basic, thorough textbook of pharmacology and therapeutics, written specifically with the needs of the dentist in mind. With it the dentist should be able to understand basic pharmacology, to know how and when to use specific drugs and what dosage of these drugs to use, and to know how a patient's pharmacological status will determine the treatment and medicine prescribed for that patient."

This book was reviewed by Dr. B.G. Benfey, McGill University.

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(Scientific articles)

Previously unpublished articles, critical reviews of material on advances in dentistry and clinical reports are welcomed by the Journal of the Canadian Dental Association for consideration for publication. Material is accepted by the Journal on the understanding it is submitted solely to this publication.

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Hepatitis B: a one-year follow-up

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ABSTRACT

A survey of the prevalence of hepatitis B surface antigen (HBsAg) and antibody (anti-HBsAg) was repeated as a one-year follow-up to an earlier survey at the College of Dentistry, University of Saskatchewan. HBsAg prevalence was 0.9 per cent (one case) and anti-HBsAg was 4.8 per cent. The results represent one new case of HBsAg and an additional person demonstrating anti-HBsAg. Development of anti-HBsAg more often occurred with asymptomatic infection in this population. It appears that risk of exposure in dentistry may lead to asymptomatic infection and development of anti-HBsAg. Management of patients in groups at greater risk of being carriers should be conducted with simple precautions to prevent transmission of hepatitis B virus.

The prevalence of hepatitis B virus (HBV) infection has increased almost 10-fold since 1967, and health care professionals, including dentists and dental auxiliaries, are at greater risk of exposure than comparable socioeconomic groups.¹⁻⁶ Hepatitis B surface antigen (HBsAg) is present in blood and saliva of HBV patients and carriers.^{1,3-5,7-15} Hepatitis B infection can be considered a potential risk in the practice of dentistry.

Dentists may be at greater risk of contact with HBV, but may not be at increased risk of acquiring the disease. Dentists in Canada,¹¹ Denmark,¹³ England,^{7,8} Israel¹⁶ and Norway¹⁷ did not show increased disease compared with control groups of the general populations. A recent study¹⁸ at the University of Saskatchewan showed extremely low prevalence of HBsAg, indicating low prevalence of contact and disease. However, evidence of increasing HBV infection has been noted in dentists in New Zealand⁸ and the United States.^{1,2,4,12} Approximately 13 per cent of American dentists have recently acquired HBV, whereas 4 per cent of the general population was reported to have experienced this infection.

The present survey is a one-year follow-up to an earlier study.¹⁸ Its purpose is to note any changes in the study population and to indicate the present risk of acquiring HBV infection at the College of Dentistry, University of Saskatchewan.

MATERIALS AND METHODS

1. Study population

Volunteers of the faculty, staff and student body of the College of Dentistry participated in the study. Prior to

screening for HBsAg and anti-HBsAg, information was presented to all faculty members, students and staff, to inform them of the significance of HBV infection in dentistry, the risk of infection in dental personnel and the purpose of the screening. A medical and dental questionnaire and consent form were sent to all candidates for the screening.

2. Collection of specimen

Blood was collected by venipuncture, from December 1980 to January 1981, by phlebotomists of the Chemical Pathology Laboratory at the University Hospital. All sera were maintained at -20°C until tested.

3. HBsAg testing

The presence of HBsAg was determined by radioimmunoassay (Abbot AusriaTM 125I).

4. Anti-HBsAg testing

Antibody to HBsAg was determined by radioimmunoassay (Abbott AusAb^R).

5. Analysis of results

The data were analyzed in a standard manner. Correlations were completed using student's T-test. The results of this study were compared with findings in an earlier study at this institution.¹⁸

RESULTS

1. Serum study

The results of the serologic study are summarized in **Table 1**. Full-time faculty members who participated in the study did not show evidence of HBsAg. One general-practice resident was found to be HBsAg negative and anti-HBsAg positive. All dental students were invited to participate in the study. One student had demonstrable HBsAg at the time of screening and the results were duplicated to rule out a false-positive result. Further testing revealed presence of HBsAg and no evidence of core antigen and anti-HBsAg. This individual remained asymptomatic and two months later became HBsAg negative and anti-HBsAg positive. Suspected HBV carrier contacts of the student at the College were examined and did not demonstrate a history of disease or serum evidence of HBV. The student participated in an externship between the final years of dentistry, and potential sources were investigated. Two possible subjects who were carriers were identified as the potential sources.

Table 1
Prevalence of HbsAg and Anti-HBsAg

Groups	No. of sera tested (% of total group)		HBsAg positive	Anti-HBsAg positive	Total
Full-time faculty	7	(44%)	0 (0%)	0 (0%)	0 (0%)
Full-time faculty	6	(20%)	0 (0%)	1 (3.3%)	1 (1.3%)
Dental residents	1	(50%)	0 (0%)	1 (50%)	1 (50%)
Clinical staff	7	(70%)	0 (0%)	1 (10%)	1 (10%)
Dental students					
Year I	21	(84%)	0 (0%)	0 (0%)	0 (0%)
Year II	18	(75%)	0 (0%)	0 (0%)	1 (0%)
Year III	14	(61%)	0 (0%)	1 (4.3%)	1 (4.3%)
Year IV	12	(60%)	0 (0%)	1 (5.0%)	1 (5.0%)
Year V	19	(100%)	1 (5%)	0 (0%)	1 (5%)
TOTAL	105	(62%)	0 (0.9%)	5 (4.8%)	6 (5.7%)

Of the 105 persons, the overall prevalence of HBsAg was 0.9 per cent (1 case) and of anti-HBsAg was 4.8 per cent (5 cases). No significant differences were seen between the subject groups. Subsequent conversion of the positive HBsAg case to anti-HBsAg positive showed the prevalence of HBsAg to be zero, anti-HBsAg was 5.7 per cent (6 cases).

2. Questionnaire survey

Forty-seven participants submitted questionnaires at this screening. Those with no changes since the previous screening one year earlier did not.¹⁸ The results of the questionnaire survey of the present screening supported the previous study. Evaluation of factors potentially related to contact with HBV was made, and no positive correlation between age, years of dental practice and serologic testing was seen. No significant correlations were noted between types of dental specialty in full-time and part-time faculty and serology. The majority of faculty, staff and students with clinical activity used gloves occasionally for special procedures, but never in clinical practice. Those with positive serologic findings had not used gloves routinely; however, this was not a statistically significant finding. No correlations were possible between reported accidental skin puncture and the evidence of HBsAg and anti-HBsAg. One part-time faculty member had a history of symptomatic HBV infection and demonstrated anti-HBsAg in his serum. None reported histories consistent with clinical HBV infection, including subjects with serological findings. Six subjects reported a history

of jaundice but did not demonstrate HBsAg or anti-HBsAg. No relationship was seen between history of general systemic disease and the incidence of HBV infection.

Statistical evaluation of the results was not helpful due to the limited serological findings in the population studied; also, correlation between the serologic findings and history was not possible. The results of this follow-up study are useful in discussion of trends and for comparison with an earlier survey.¹⁸

DISCUSSION

It is commonly believed that members of the dental profession are at greater risk of acquiring HBV infection.^{1,2,9,19} The present study is a follow-up to a survey completed one year earlier.¹⁸ In the 1980 survey, the prevalence of HBsAg and anti-HBsAg was found to be lower than in healthy volunteer blood donors of ethnic origin, in the Saskatchewan area, matched for age and sex. This follow-up study allows a discussion of experience with HBV at the College of Dentistry, University of Saskatchewan.

Full- and part-time faculty members did not demonstrate the presence of HBsAg. However, one subject was anti-HBsAg positive; he gave a history of symptomatic HBV infection and has remained antibody-positive since the previous survey. Reports of symptomatic HBV infection from contact with this dentist as a possible source were denied. Few of the part-time faculty (20 per cent) volunteered for this study; this may be due in part to their varied schedule at the college. More part-time members had participated in the first survey. Also, fewer full-time faculty members participated in this follow-up survey. This may be due in part to poor communication regarding possible changes in status and the value of follow-up of an individual's status.

The present results support our earlier conclusion that the possibility of acquiring HBV during activities at the College of Dentistry is low. This also supports the findings of Berris et al⁹ — that Canadian dentists do not belong to a high risk group for HBV infection.

The prevalence of HBsAg in the staff and residents was zero. One staff member was tested previously and retained anti-HBsAg titres. One dental resident demonstrated anti-HBsAg but gave no history of symptomatic disease. He felt exposure probably occurred in a previous residency program in another city, where a significant number of HBV carrier patients were managed.

The prevalence of HBsAg in dental students was 0.9 per cent (one student). This student was tested in the previous

study and had not demonstrated any serum changes. The results of the assay were duplicated and no e-antigen nor core antigen was demonstrated. This case subsequently converted to become HBsAg negative and anti-HBsAg positive, and no signs or symptoms associated with HBV infection occurred. As part of a public health responsibility, potential sources of HBV were investigated. A review of patients treated at the College of Dentistry and testing of a suspected patient did not reveal a potential source. The student had participated in an externship program, and two patients as potential sources were found. However, it should be noted that other sources outside of dentistry were possible. The student continued clinical activities with precautions being taken.^{18,20-22,25} These precautions included the use of gloves, mask, care in preparation of materials and instruments, proper packaging, identification and sterilization of instruments. No cases of HBV infection have been reported in six months since the student became antigen negative. The prevalence of anti-HBsAg in the student population became 3.8 per cent when this student became anti-HBsAg positive. This represents an increase in prevalence from 1.4 per cent in the earlier survey. The results of our surveys among the dental students were similar to those of a study of medical students at the University of Saskatchewan.²³ The prevalence was much lower than a study of senior dental students at an American dental school.¹² Both of our studies imply a low risk of HVB infection at the College of Dentistry, University of Saskatchewan.

All but one case with evidence of HBV infection were asymptomatic. This finding indicates that exposure to HBV and host response most often does not result in symptomatic infection. Where dentists are at higher risk of exposure, anti-HBsAg response, without disease, is the more common result.

No significant correlations were found between the serum findings and response to the questionnaire, as in our previous study.¹⁸ No correlations between age, history of known management of HBV carriers, history of skin puncture, use of surgical or examination gloves and serologic evidence of HBV were demonstrated. Although not demonstrated in this population, these factors have been reported by others to be related to HBV infection.^{1,2,4,7-10,21,24-26} Six subjects reported a history of jaundice; however, testing for HBV was negative, and this indicates that jaundice may have been related to other causes. Only one subject with anti-HBsAg reported a history of symptomatic disease; five others with anti-HBsAg did not reveal a history of symptomatic hepatitis. A history of jaundice or hepatitis B infection is not a reliable

indicator of actual HBV infection, nor related to the prevalence of HBV infection in the general population. The prevalence of HBV carriers is low in England,² Canada,⁹ Denmark,¹⁰ Norway¹¹ and Israel²⁷ compared with other countries, including the United States^{1,2,12,26} and Asian countries.²⁸ However, variations occur within countries.^{2,23} The Saskatoon region is an area where the prevalence of HBV carriers is low (0.1 per cent), and also the risk of exposure is low. Adequate precautions must be taken to prevent acquiring and transmitting this and other infectious diseases. Groups in the population with high carrier rates should be recognized, including physicians, dentists, medical laboratory personnel, nurses, personnel and patients in renal units, mentally retarded and institutionalized children, drug addicts, male homosexuals, and people from geographic areas of high HBV.^{1,3-6,17,26,28-30} It is prudent to assume that people from the high risk groups are potential carriers and to use precautions during their management. We believe that dental personnel can adequately protect themselves from acquiring infectious disease by effective sterilization of instruments and maintenance of sanitation in the clinical area. During treatment, use of high volume suction, gloves and safety glasses are recommended, and use of a mask may afford some additional protection.^{18,20-22,24}

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Internship in general dentistry

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An internship in general dentistry is an educational position in a hospital department of dentistry, that provides supervised clinical experience in the dental treatment and management of certain categories of patients who are better or necessarily treated in a hospital and who are not commonly seen in dental-school clinics. Internships are usually held by dentists in the year immediately following their graduation.

Internships, both dental and medical, have evolved over the years from being poorly paid service appointments, offering their incumbents the opportunity to gain clinical experience by assisting and watching members of active hospital staff in return for performing the simpler routine clinical tasks, and perhaps rather more on charity patients, into full fledged educational positions with a formal clinical and didactic curriculum usually under the aegis of a university.

In the past, these positions have been called "rotating" or "mixed" dental internships following medical precedents to distinguish them from "straight" internships in which only one discipline, for example surgery, is practised. As straight internships have been very uncommon in dentistry, this distinction served little purpose, and the more descriptive term "general dental internship" has been generally adopted. To confuse the nomenclature further, in the United States these positions are usually called residencies, while in Canada they are usually called internships. Interns and residents are together known as the hospital house-staff. In medicine, internships are the

positions held by physicians in the year prior to registration, while residencies are hospital educational positions held in a single specialty after registration. As dentists may be registered immediately on graduation, most general dental interns have a full licence to practise, hence might be more appropriately graded as residents. However, the provincial ministries of health, who provide the salaries for house-staff, base their classification of house-staff rank not on whether a full licence to practise is held but on the number of years of hospital practice experience. Hence a dentist taking up one of these positions, no matter how many years after graduation, is classed, and paid, as an intern unless he has previously held a position on a hospital house-staff.

DENTAL INTERNSHIP CURRICULUM¹

Prerequisites

It is necessary for a hospital to have a fully functional department of dentistry before it is possible to provide an adequate internship program. All forms of dental treatment must be provided by the department, not only surgery. There has to be an adequate active staff for the department, including general dentists and oral surgeons; with other dental specialists as appropriate to the volume and variety of the patient load. One or more members of active staff should be present in the department on at least a major part-time basis to provide continuity in patient

care and intern supervision. Obviously the patient load of the department has to be sufficiently large to provide adequate clinical experience for the interns.

Clinical Curriculum

The major educational objective of internships in general dentistry is to provide supervised clinical experience, leading to competence, in the dental investigation, management and treatment of patients requiring hospital facilities for dental care. The categories of patients falling into this group are as follows:

1) Patients with compromising systemic disease

This is the largest group of patients treated in hospital dental departments. The systemic diseases that necessitate hospital care comprise virtually all of the more serious forms of medical conditions, with cardiovascular diseases giving rise to the largest sub-group simply because these are the most common serious diseases. Dental interns must therefore become familiar with the dental management of patients with ischaemic, hypertensive and rheumatic heart diseases. Similarly they should become familiar with the dental management of patients with as many other types of serious systemic disease as possible in their one year tenure of the internship. This necessitates a comprehensive knowledge of general medicine, skill in taking the medical history, and the ability to work in co-operation with many physicians. The acquisition of the skills necessary for such collaboration is an essential part of an internship.

Collaboration with the patient's general dentist is often necessary, as in many patients whose systemic condition is of moderate severity, only part of their dental care (essentially surgical procedures) need be carried out in hospital, while restorative, prosthetic and other aspects may be safely performed in a private dental office.

2) Patients requiring major oral surgery

General dental interns are given the opportunity to assist oral surgeons in performing major procedures, both under general and local anaesthesia. They must become completely familiar with the *modus operandi* of a hospital operating room and with the maintenance of surgical asepsis. At the end of their internship they should be fully competent to perform multiple extractions and other surgical procedures within the usual compass of a general dentist under general anaesthesia in a hospital operating room. They should also have

acquired experience in the initial emergency care of patients who have sustained traumatic injuries to their mouth and jaws.

3) Patients with the less common diseases of the mouth, jaws and salivary glands

Dental interns should have the opportunity to gain experience in the investigation and treatment of patients with this group of diseases, who are usually referred to a hospital for the purpose. The conditions include vesiculo-bullous conditions, dermatological and haematological disorders with oral manifestations, specific infections of the mouth, keratotic lesions, benign and malignant ulcers, cysts, neoplasms, neuralgias and temporomandibular joint abnormalities. It is desirable to have an oral pathologist on the staff of the dental department as he or she will attract referrals of patients in this category, hence increasing the clinical experience available to the interns.

4) Emergency patients

All general hospitals have emergency departments to which patients with all forms of acute disease and injuries present. For those patients whose affliction affects the mouth and is of a level of severity beyond the competence of the emergency physician, it is customary to request the dentist on call to attend to the patient. Dental interns should be assigned to this emergency duty to gain clinical experience in the management of infection, trauma and haemorrhage. A back-up call system is necessary, usually staffed by oral surgeons, for cases beyond the competence or experience of the interns. In practice, most dental interns are on call to the hospital emergency department, outside office hours, for one week in either three or four.

5) Patients with mental or physical disabilities

Many patients in these categories are referred to hospitals for dental care as they present management problems to dentists working in a private office. Physically handicapped patients who are confined to wheelchairs or to stretchers often have access difficulties to private dental offices, while hospitals are all constructed to make easy the passage of such vehicles. Most of the larger hospital dental departments have one operatory designed specifically to accommodate patients on stretchers or in wheelchairs.

The number of mentally handicapped patients being referred to general hospitals for dental treatment has diminished over the last decade or so. This appears to

be the result of increasing competence in management by general dentists, and perhaps also as a result of the increased use of intravenous sedation. The more severely mentally handicapped population is largely institutionalized and receives dental care in the institution. Hence only a fairly small number of mentally handicapped patients who present greater management problems than can be surmounted in an office setting remain to be referred to hospital for dental care. Dental interns should be afforded experience in the dental care of both these groups of disabled persons.

6) Hospital in-patients who develop coincidental dental disease

As the majority of hospital in-patients have, either due to the condition for which they have been admitted or due to major surgery, lowered general resistance to disease, it is common for them to develop acute exacerbations of pre-existing dental disease of the commoner types such as periapical infection or periodontal disease. It is part of the function of a hospital dental department to provide treatment for these patients and part of the clinical experience of a dental internship. If, as in many cases, it is anticipated that the patient will shortly be returned home with no continuing medical problem, it is customary to provide emergency dental care in the hospital and to refer the patient to his/her own dentist for further treatment after discharge.

7) Patients requiring maxillo-facial prosthodontic care

It is desirable, although not always possible, for dental interns to have the opportunity to assist in the provision of maxillo-facial prosthodontic treatment for patients undergoing major facial resections for malignancies. The number of patients in this group is not large but, for the individual patient, good maxillo-facial prosthodontic care makes life immeasurably more tolerable. This type of surgery is not provided in all general hospitals hence not all interns can be given experience in it. It is desirable in those hospitals where it is performed to have a specialist maxillo-facial prosthodontist on staff.

While not mandatory, clinical and didactic instruction in intravenous sedation is included in most dental internship programs. Familiarity and competence in this apprehension-allaying modality has become a virtual necessity for the practice of hospital dentistry, particularly in the management of those patients with cardiac disease who form such a large segment of the hospital dental department patient population.

In the course of providing dental care in hospital, the interns should become thoroughly familiar with hospital administrative procedures for patient care, including the arrangements for admission and discharge. They should learn to use the patient case notes, to record the dental and medical history, to write orders and to make progress notes. They should become familiar with the basic laboratory determinations and know how and when to order these tests.

Didactic Curriculum

A seminar program should be arranged primarily for the benefit of the dental interns, but not necessarily restricted in attendance to dental interns, with coverage of both dental and medical topics of relevance to the clinical experience described above. Clearly a very wide range of subjects might be appropriately covered, selected from most of the dental specialty disciplines as well as many medical areas. It is customary to include updating reviews of, for instance, antibiotics and analgesics, which are of value to interns who are having to prescribe these drugs for the first time some years after studying them in the undergraduate course in pharmacology. Case presentations and discussions are also valuable educationally and the interns should all be given the opportunity to conduct one or two such seminars themselves.

They should also attend hospital grand rounds regularly and should be encouraged to go to other educational occasions in the hospital when the subject is of interest and relevance to them. In major teaching hospitals, rounds, seminars and lectures are being given daily, so that there are large numbers from which the dental interns may choose.

Dental interns should be encouraged to use the hospital and departmental libraries frequently so that the practice of reading the professional literature becomes a habit.

Assignments to Other Hospital Departments

Dental internship programs include assignments to other hospital departments, either on a full-time or on a sessional basis. The objective of these assignments varies somewhat between departments but is basically to give the dental intern concentrated clinical experience in the activities of the other department. Dental interns have been assigned to several divisions of hospital departments of medicine such as cardiology, dermatology and haematology, to plastic surgery, emergency services, otolaryngology, pathology and to family practice departments with the most common assignment being to the department of

anaesthesia where they usually learn to monitor vital signs, to pass endotracheal tubes and to appreciate the problems inherent in the clinical practice of the discipline. In some internship programs the selection of assignments is made partly on the interests and career goals of the individual interns, so that an intern who intends subsequently to enter oral surgery would have rather different assignments from an intern intending to go into general practice with a part-time hospital position.

ACCREDITATION PROCEDURES

The Canadian Dental Association operates a voluntary accreditation process for dental internships conducted by the Council on Hospital Services. A pre-requisite is that the hospital dental service must be fully accredited with the C.D.A. A fairly extensive application and self-study manual has to be submitted, describing the curriculum, staff, facilities, administration and patient population, and this with the surveyors' reports are considered by the Council on Hospital Services. To receive approval, the curriculum, staffing, patient population and facilities have to be appropriate to the number of internship positions and have to conform generally with the curriculum described above.

INTERNSHIP POSITIONS IN CANADA

There are approximately 45 dental internship positions in Quebec, about 30 in Ontario, and two or three in each of Manitoba, Saskatchewan, Alberta and British Columbia; there are none in the Maritime Provinces, to the author's knowledge. Most of these positions are funded by the Provincial Ministries of Health but a few are funded by the hospitals from other sources. In recognition of the educational value of dental internships to the health care of the community, the Ontario Ministry of Health has added four additional positions over the last three years, during which period the number of medical internship and residency positions have been reduced.

The value of these positions as realized by graduating dentists is shown by the number of applicants — 54 from Canada and 26 from other countries, for the 21 positions in the University of Toronto teaching hospitals in 1981.

ADMINISTRATION OF DENTAL INTERNSHIP PROGRAMS

In the past, dental internships have generally been purely hospital positions, with emphasis on the clinical service

commitment, and have been under the administrative direction of the hospital staff; but over the last decade or so, there has been a general tendency for them to come under the administrative control of a university faculty of dentistry because of the fact that they have come to be recognized as essentially educational positions. For example, such a change has occurred in Ontario at the behest of the provincial Ministry of Health. There appears to be no theoretical educational reasons why a general teaching hospital in a health services centre that does not have a dental faculty should not have a general dentistry internship program if the hospital dental staff are sufficiently interested and adequate in number, if the service activities of the dental department are large and varied enough and if the other hospital staff provide the necessary support. However, it is probably easier for a dental faculty to provide the necessary staff to ensure appropriate clinical supervision in one of their associated teaching hospitals, and to conduct an appropriate didactic teaching program.

DISCUSSION

Dental internships are educationally valuable, not only to recent graduates who intend to practise in hospitals as general dentists or who intend to specialize but also to those who subsequently enter general practice in a conventional office setting. An internship gives an opportunity for the honing of virtually all clinical skills under experienced supervision and it provides an unrivalled opportunity to gain clinical acumen in the management of the medically, physically and mentally compromised patient. A post-internship dentist is much more competent in all these areas than his classmate who entered general practice immediately on graduation, hence is able to make a greater contribution to health care in general practice. He is also able to assume a position on the active staff of a hospital dental department and immediately become active and efficient in this aspect of professional practice.

The advantages to the recent graduate of holding an internship are so cogent that a Task Force of the American Association of Dental Schools², studying advanced dental education in the United States, has recently recommended that the number of dental internship positions should be increased to accommodate one half of dental school graduates by the mid 1980's.

In 1980, there were 993 such positions in the U.S.A., the total having increased steadily through the 1970's from only 516 in 1971.³ With approximately 5500 dental graduates being produced annually in the U.S.A.,⁴ there are at

present intern positions available for only 18 per cent. In Canada, where approximately 450 dentists graduate annually, there are internship positions for the same percentage, but these are geographically distributed very unevenly across the provinces, with the preponderance in Quebec.

A recent report on dental education in Britain⁵ has recommended that there should be a compulsory year after graduation spent in supervised practice for all dental graduates before full registration. As there are insufficient internship positions in the United Kingdom for all dental graduates, this report recommends that university-approved training positions in general practices should also be used.

No comparable national studies of dental education have been conducted recently in Canada but it seems reasonable to assume that if one were to be done, the educational advantage of hospital dental internships would be similarly recognized.

On completion of a year as a general dental intern, dentists have improved and extended their professional capabilities in many ways. They have become experienced and competent in the management of patients with complicating systemic disease and those with physical or mental disabilities. Their knowledge of medicine is strengthened. They have enjoyed a year of supervised practice in all their clinical dental skills. In oral surgery they have acquired considerable clinical experience and have become familiar and competent in working in a hospital operating room with general anaesthesia. In oral pathology they have had an opportunity to widen greatly their clinical experience. They have become thoroughly familiar with the complicated operation of a general hospital. Many will have learned the use of intravenous sedation, and some will have acquired some clinical experience in maxillo-facial prosthodontics. They will all have become much more confident of their professional abilities, while also being better able to assess the situations in which specialist consultation is indicated. There is no educational facility other than a hospital dental department in which these results can be achieved.

In the author's opinion, the educational value of dental internship to the dental profession and ultimately for the betterment of the health care of the community is such that efforts should be made to increase substantially the number of positions available for graduating dentists in Canada, and to have the positions more evenly distributed across the country.

Dr. Main is Chief of the Department of Dentistry, Sunnybrook Medical Centre, University of Toronto, and Professor of Oral Pathology and Chairman of the Hospital Services Committee, Faculty of Dentistry, which is responsible for the educational aspects of all general dental internships in the University teaching hospitals. He has served as Ontario representative on the Council on Hospital Services of the Canadian Dental Association from 1975-1981.

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The use of 30 gauge needles for the administration of local anaesthetic in North American dental schools

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Saskatoon, Saskatchewan

ABSTRACT

A poll of the North American dental schools showed that the majority do not favour the use of 30 gauge needles for dental anaesthesia.

Controversy has existed over the use of 30 gauge needles for the administration of local anaesthetics in dentistry. On the one hand, it has been claimed that 30 gauge needles are necessary for certain injection techniques and hurt the patient less; on the other hand, it has been claimed that 30 gauge needles pose an unnecessary

risk to the patient and have no place in dental practice. Arguments have been presented to support both views.

In an effort to determine current attitudes toward the use of 30 gauge needles, all dental schools in Canada and the United States were polled to determine what undergraduate dental students are being taught about the use of 30 gauge needles. The poll attempted to ascertain whether or not students were introduced to the use of 30 gauge needles in the course of their local anaesthesia instruction. In addition, it was recognized that as students encountered other disciplines within their curriculum they might be presented with differing philosophies on the use of 30 gauge needles; therefore, the poll also attempted to determine

the extent of availability of 30 gauge needles to the students in the clinical setting. The following two questions were presented in the poll:

1. In teaching local anaesthesia to the undergraduate students, do you encourage or discourage the use of 30 gauge needles?
2. Are 30 gauge needles available for student use in undergraduate clinics? If so, for routine use or by special request?

This was sent to 52 dental schools in the United States and nine other dental schools in Canada. Of these, 39 American and seven Canadian schools responded. The results may be seen in Figure 1. The direct response to the questions given show that 41 schools (89.1 per cent of those that responded) discouraged the use of 30 gauge needles for the administration of local anaesthetic regardless of the technique. Of these, six schools made comments indicating that they strongly discourage the use of 30 gauge needles. There was one school only which encourages regular use of 30 gauge needles and this was for specific techniques only. Of the 46 schools, 20 (63.0 per cent) do not make 30 gauge needles available to undergraduate students, while 12 schools (26.1 per cent) make them available for restricted use or on special request. Five schools (10.1 per cent) make 30 gauge needles routinely available and some of the comments imply that the students have been taught the rationale for proper needle selection; therefore, they are able to make the correct choice themselves. Yet

Figure 1		
A. Number of schools which encourage/discourage use of 30 gauge needles in undergraduate teaching.		
Encourage	Recommend Specific Techniques Only	Discourage
1	4	41
B. Number of schools which make 30 gauge needles available in undergraduate clinics.		
Routinely	Available for Restricted Use or by Special Request	Not Available
5	12	29

another response suggested that an insecure, shaky student should not use 30 gauge needles because of the increased possibility of breakage; the respondent claims to have retrieved broken 30 gauge needles three times already.

The specific indications that were cited for the use of 30 gauge needles are noted in the following categories. The use of 30 gauge needles was given five times for use in the area of endodontics for intra-pulpal injections. In the area of periodontics, injection into the periodontal ligament was given as a reason four times. Use in pediatric dentistry was given three times. Infiltration and interdental injections were also given as an indication for the use of 30 gauge needles. It would seem therefore, that when a school does allow the use of 30 gauge needles it is only for specific techniques and not general usage.

Several responses to the poll went on to indicate just which selections of needles their school uses. The most common selection appears to include 25 gauge and 27 gauge needles as noted by 12 responses. Seven schools restrict the use of needles to 25 gauge only. Four schools use primarily 27 gauge needles. Several other combinations were noted once or twice including 26, 28, and 30 gauge needles.

A review of some of the textbooks pertaining to the subject reveals the following opinions of the authors. Richard Bennett¹ in his textbook recommends against the trend toward finer needles and advocates the use of nothing smaller than 25 gauge needles for administering local anaesthesia. Gerald Allen² recommends 25 gauge needles as the best compromise for dental anaesthesia. Stanley Malamed³ also recommends against the use of 30 gauge needles. He suggests that 25 gauge needles be used for all injections provided that the risk of positive aspiration is exceedingly low and tissue penetration is not great. Niels Jorgensen⁴ recommends 25 gauge or preferably 23 gauge needles for administering local anaesthesia. In his textbook relating to emergencies in dental practice, Frank McCarthy⁵ recommends nothing smaller than 25 gauge needles be used for local anaesthesia administration. The general impression is that there is no indication for the use of 30 gauge needles.

There are several contra-indications to the use of 30 gauge needles³, most of which have been emphasized by some of the respondents to the poll. They are far less reliable in being able to aspirate when positioned intravascularly than larger gauge needles. They are more flexible and, therefore, more easily deflected away from the intended target. They are more susceptible to breakage. The

apparent indications suggested by the proponents of the use of 30 gauge needles seems to be physical size and discomfort of injection. Size amongst the commonly used selection of needle gauges is insignificant unless trying to pass the needle down the finest of pulp canals. Relative to the discomfort of injection, several studies have shown that the differences between the commonly used gauges of needles are imperceptible.^{6,7,8} One respondent to the poll, himself, attempted to differentiate between the various sizes of needles used on him and he was unable to do so. Malamed³ describes how to perform such a test. Thus, there seem to be few legitimate indications that weigh in favour of using 30 gauge needles over the above noted contraindications.

SUMMARY

Sixty-one dental schools in North America were polled regarding the use of 30 gauge needles in their institution for the administration of local anaesthesia. Of the 46 that responded, it was noted that 41 schools discouraged the use of 30 gauge needles. Twenty-nine schools do not make 30 gauge needles available and another 12 schools make them available only for restricted use or by special request. Although there appears to be a difference of opinion regarding the use of 30 gauge needles, the majority opinion is in favour of not using 30 gauge needles for dental anaesthesia.

Dr. Ross is an associate professor and head of the Department of Oral Surgery and Anaesthesia, College of Dentistry, University of Saskatchewan, Saskatoon, Saskatchewan.

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Announcements

CANADA

June/juin

Canadian Society for Microbiology Meeting — Symposium on Oral Microbiology, Laval University, Quebec city, June 7, 1982. Contact: Denis Mayrand, École de médecine dentaire, Université Laval, Cité Universitaire, Québec, G1K 7P4.

Alberta Dental Association 1982 Convention (theme "Prosthodontic Patient of 1980's"), Westin Hotel, Edmonton, Alberta, June 9-12, 1982. Contact: Dr. A. Bene or Mrs. F. Ingham, 4044 Dentistry Pharmacy Centre, University of Alberta, Edmonton, Alta. T6G 2N8.

College of Dental Surgeons of Saskatchewan 1982 Convention, Sheraton Cavalier Hotel, Saskatoon, Sask., June 10-12, 1982. Contact: Dr. C.R. Hill, 366 3rd Ave., S., Saskatoon, Sask. S7K 1M5.

XII Biennial Conference on Canadian Dental Education and Research and Meetings of the ACFD, Dalhousie University, Halifax, Nova Scotia, June 16-21, 1982. Contact: Kaireen Vaissou, Co-ordi-

nator, Continuing Education in Dentistry, Faculty of Dentistry, Dalhousie University, Halifax, N.S. B3H 3J5. Phone: (902) 424-2248.

73rd Annual Conference of the Canadian Public Health Association, Explorer Hotel, Yellowknife, Northwest Territories, June 21-24, 1982. For further details contact: Dr. David Martin, Chairman, Scientific Program Committee, c/o Canadian Public Health Association, 1335 Carling Ave., Suite 210, Ottawa, Ont. K1Z 8N8. Phone: (613) 725-3769.

July/juillet

The Sixth Congress of the International Association of Dentistry for the Handicapped, Harbour Castle Hilton Hotel, Toronto, Ontario, July 20-25, 1982. Contact: The Programme Chairman, Sixth Congress I.A.D.H., Dept. of Paedodontics, Faculty of Dentistry, University of Toronto, 124 Edward St., Toronto, Ont. M5G 1G6.

The Pan-Pacific International Symposium on Biomaterials, University of British Columbia, Vancouver, British Columbia,

July 28-30, 1982. Contact: Dr. R.H. Roydhouse, Secretariat Biomaterials '82, 1704, 1200 Alberni St., Vancouver, B.C. V6E 1A6.

August/août

Second International Congress on Hospital Dental Practice, Four Seasons Hotel, Toronto, Ontario, August 26-29, 1982. Contact: Dr. C.O. Munro, Programme Chairman, 2nd International Congress on Hospital Dental Practice, 124 Edward Street, Toronto, Ont. M5G 1G6.

October/octobre

Canadian Association of Oral and Maxillofacial Surgeons 1982 Scientific Session: Pre-Intra and Post-Operative Management of the Major and Maxillofacial Surgery Patient, Four Seasons Hotel, Toronto, Ontario, October 15-17, 1982. Contact: Dr. David M. Slavkin, Co-chairman, 1920 Weston Rd., Suite 209, Weston, Ont. M9N 1W4.

Announcements

The Fourth Biennial Symposium on Occlusal Studies, Hyatt Regency Hotel, Vancouver, British Columbia, October 17-20, 1982. Contact: The Society for Occlusal Studies, 1729 South Douglass Road, Anaheim, California 92806, U.S.A. or The Director, Division of Continuing Dental Education, 2199 Westbrook Mall, U.B.C., Vancouver, B.C. V6T 1Z7.

The Annual Meeting of the Canadian Academy of Endodontics, Four Seasons Hotel, Montreal, Quebec, October 22-24, 1982. Contact: Dr. Herb Borsuk, 4141 Sherbrooke St. W., Suite 515 Westmount, Que. H3Z 1B8. Phone: (514) 933-8424.

December/décembre

The Toronto Academy of Dentistry Annual Winter Clinic, Royal York Hotel, Toronto, Ontario, December 6, 1982. Contact: Academy of Dentistry, 234 St. George St., Toronto, Ont. M5R 2P2. Phone: (416) 967-5649. PLEASE NOTE CHANGE OF DAY AND DATE FROM PREVIOUS YEARS.

International

June/juin

The 1982 Annual & Scientific Meeting of the British Dental Association, Metropole Hotel, Brighton, England, June 2-5, 1982. Contact: British Dental Association, 64 Wimpole Street, London W1M 8AL, England.

Holistic Dental Association Conference, Doubletree Inn, Houston, Texas, June 3-6, 1982. Contact: Dr. Hershall A. Allan, Program Chairman, Holistic Dental Association, 6550 Tarnef, Suite 15, Houston, Texas 77074, U.S.A.

The 88th Annual Meeting of the American Dental Society of Europe, Park Hotel, Sandefjord, Norway. June 28-July 2, 1982. Contact: Hon. Sec. Dr. Brian J. Parkins, 57 Portland Place, London W1N 3AH, England.

July/juillet

Academy of General Dentistry's 30th Annual Meeting, The Sheraton-Boston Convention Complex, Boston, Mass., July 10-14, 1982. Contact: AGD, 211 E. Chicago Ave., Suite 1200, Chicago, IL 60611, U.S.A.

The New Zealand Dental Association's 11th Biennial Conference, Rotorua, New

Zealand, July 17-23, 1982. Contact: New Zealand Dental Association, 238 Remuera Road, P.O. Box 28 084, Auckland 5, New Zealand.

September/septembre

Asociacion Argentina de Ortopedia Funcional de Los Maxilares, 25th Anniversary, Buenos Aires, Argentina, September 19-23, 1982. Contact: Dr. S.A. Gandolfo, Secretario, Asociacion Argentina de Ortopedia Funcional de Los Maxilares, Buenos Aires, Argentina.

October/octobre

Third International Dental Congress on Modern Pain Control, Tokyo, Japan, October 3-6, 1982. Contact: Third International Dental Congress on Modern Pain Control, c/o Japan Convention Services Inc., Nippon Press Center Building, 2-1, Uchisaiwai-cho 2-chome, Chiyoda-ku, Tokyo 100, Japan.

Fédération Dentaire Internationale, 70th Annual World Dental Congress, Vienna, Austria, October 11-16, 1982.

Second International Symposium on Overdentures, San Antonio, Texas, October 15-17, 1982. Contact: Dr. K.D. Rudd, Associate Dean for Continuing Dental Education, University of Texas Health Science Center at San Antonio School, 7703 Floyd Curl Dr., San Antonio, Texas 78284. Phone (512) 691-7451.

The Barbados Dental Association's 2nd Convention for The Caribbean Atlantic Regional Dental Association in conjunction with the Institute for Further Education, Barbados, W.I., December 5-8, 1982. Contact: Dr. Bernard Tuckman, 720 North Park Ave., Easton, Connecticut 06612, U.S.A.

November/novembre

International Congress of the Association Dentaire Francaise, Palais des Congres, Paris, France, November 23-27, 1982. Examining the two main aspects of professional activity — Preventive Dentistry & Therapeutic Care. Simultaneous interpretation in English, French and German will be available during the main scheduled events. Contact: Dr. Guy Roberts, Secretary-General, 92 avenue de Wagram, 75017 Paris, France.

British Dental Association — Metropolitan Branch, First International Pros-

thodontic Symposium, Royal Lancaster Hotel, London, England, November 25-27, 1982. Contact: Dr. M. Seymour, Programme Co-ordinator, 22 Devonshire Place, London W1N 1PD, England.

December/décembre

The Sri Lanka Dental Association's 50th Anniversary, Colombo, December 4-6, 1982. Contact: Dr. L.S.W. Dassanayake, Chairman, Organising Committee, Sri Lanka Dental Association, Professional Centre, 275/5, Baudhdhaloka Mawartha, Colombo 7, Sri Lanka.

1983+

9th Congress of Dentistry for Children, Wenworth Melbourne Hotel, Australia, February 21-24, 1983. Contact: Dr. Roger K. Hall, Royal Children's Hospital, Parkville, 3052, Victoria, Australia.

The Canadian Association of Oral and Maxillofacial Surgeons Meeting, Vancouver, British Columbia, June 3-6, 1983. Contact: Dr. Brian M. Abrams, Secretary, Canadian Association of Oral & Maxillofacial Surgeons, 410 - 11012 MacLeod Tr.S., Calgary, Alta. T2J 6A5.

Canadian Dental Association, 1983 National Convention, Vancouver, British Columbia, August 25-28, 1983.

Fédération Dentaire Internationale, 71st Annual World Dental Congress, Tokyo, Japan, November 14-20, 1983. Contact: Japan Dental Association, 1-20, Kudan-Kita 4-chome, Chiyoda-ku, Tokyo 102, Japan.

Canadian Dental Association, 1984 National Convention, Montreal, Quebec April 8-12, 1984. Contact: Dr. Morton Lang, O.D.Q., 3565 Berri St., Suite 200, Montreal, Que. H2L 4G3. Phone: (514) 842-9112.

Fédération Dentaire Internationale, 72nd Annual World Dental Congress, Helsinki, Finland, August September, 1984.

Canadian Dental Association, 1985 National Convention, Ottawa, Ontario, September 29-October 2, 1985.

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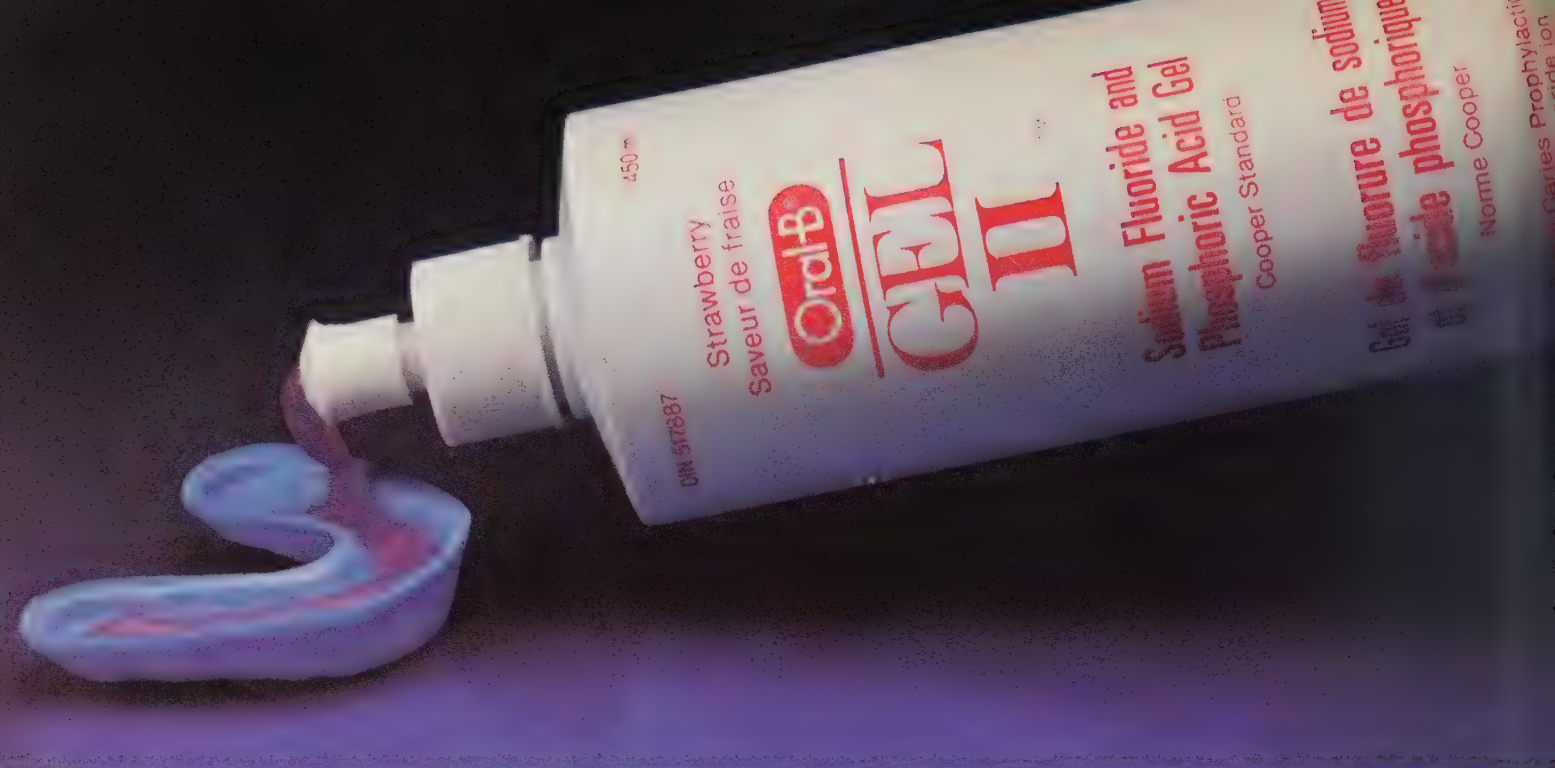
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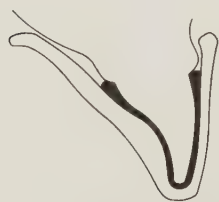
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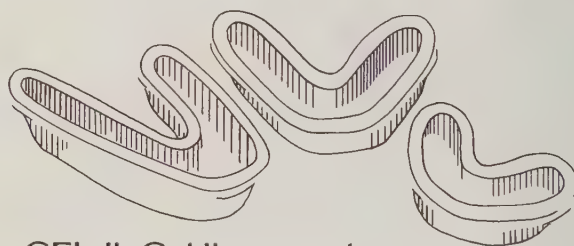
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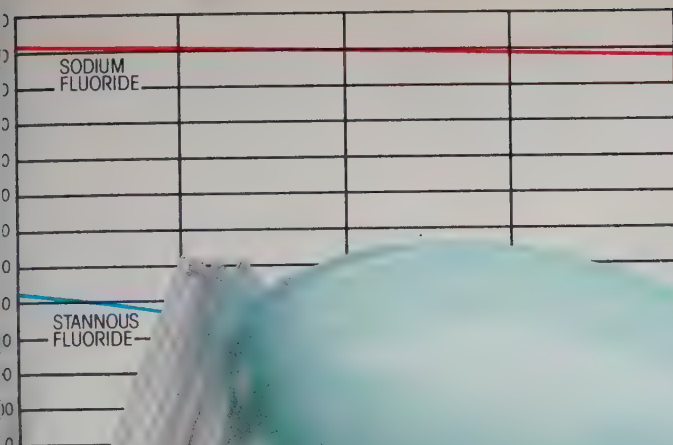
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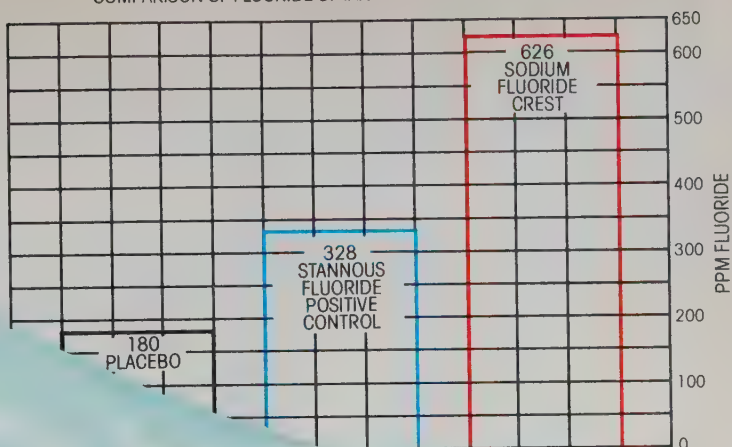
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- Beiswanger, B.B., Gish, C.W., Mallatt, M.E.: Pharm Therap Dent, 6:9-16, 1981.
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- Silverstone, L.M.: Caries Res, 11 (Suppl. 1):59-84, 1977.
- Ostrom, C.A., et al: J Dent Res, 56(3):212-221, 1977.
- Zahradnik, R.T.: J Dent Res, 59(6):1065-1066, 1980.



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Editorial

- 347 Dr. Erwin Lightman advises that it is time to stop doing studies and surveys, and to get to work giving much-needed dental care to the elderly.

Letters

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CDSPI has found that few dentists are aware of what takes place when a loss occurs. Who do you call? What do you have to do?

- 356 **Drug addict "patients" a growing problem**
Dentists are now becoming the target of drug addicts who formerly duped medical practitioners to write prescriptions for controlled drugs for spurious "health problems."

- 362 **B.C. dental health survey reveals marked improvement**
A British Columbia health ministry survey of the dental health of children in that province indicates a marked improvement over the last 20 years.

- 363 **U.S. appeals court upholds three-level membership**
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Human jaws are shrinking
A Syracuse, N.Y. orthodontist-evolutionist notes our softer diet is leading to receding jaws.

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Publications

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- 388 **Textbook of Operative Dentistry**
"This text reflects the combined efforts of two highly-acclaimed teachers and clinicians in the field of operative dentistry, along with a world authority in the related field of dental materials and, as such, provides a solid framework for the treatment of dental disease." — James Brown

Scientific

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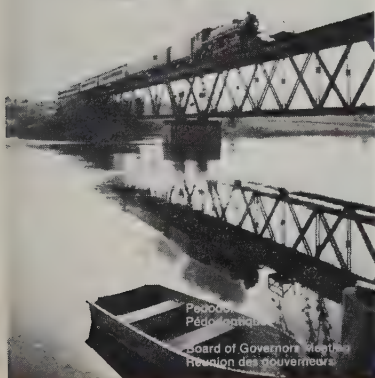
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Board of Governors
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Éditorial

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- 378** **Dégâts au cabinet du dentiste: qu'est ce qu'il faut faire?**
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- 380** **Les "patients" narcomanes: un problème croissant**
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1982

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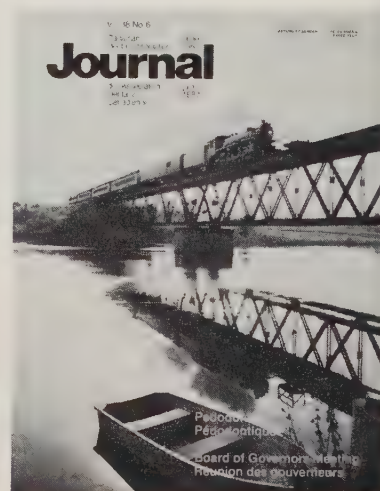
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G GERIATRIC TREATMENT A "CRYING NEED"

For the past 28 years, I have been deeply involved in dental care of the elderly. Most of this time was spent in service at Baycrest Centre for Geriatric Care in Toronto. Originally our dental service operated one morning a week. And as the institution grew we expanded to three full mornings a week.

One of the projects we undertook at Baycrest was a survey to determine the denture needs of an aged population. As each resident entered the institution a dental examination was carried out. Our survey was based on over 500 such examinations and our results were extrapolated to the general aged population.

The conclusions of course indicated a crying need for treatment. Other surveys by Banting, Martinello and Leake have come to the same conclusions. The need for dental care for the elderly of this country is great and we, the dental profession, must address ourselves to this problem now. Unfortunately we are still doing studies and surveys.

It is high time we *stopped* doing studies and surveys. We have to go into the nursing homes, old folks homes, chronic hospitals and other extended care facilities, and get to work. Even the simplest procedures such as prophylaxis, amalgam fillings, simple extractions, correcting sore spots, relining ill-fitting dentures and adjusting the bite would be a godsend to our elderly.

One of the top priorities of the elderly is their ability to be able to chew. We can help them do that. We can also raise their self-esteem with the replacement of missing teeth or the construction of a full denture.

Our greatest ally is the dental hygienist and she can provide special services for the elderly living in institutions. The hygienist can detect some of the simple needs of the patient and pass such information on to the dentist. They can provide excellent maintenance for the elderly. It has always been important to retain and maintain the natural dentition and I think the hygienist is one of the keys in the provision of such services.

Unfortunately the dental profession has closed its eyes to the needs of the elderly. On any list of priorities the elderly are usually near the very bottom.

We could awaken the interest of the profession by starting with the undergraduate. Courses in gerontology (the study of aging) should be introduced in the early undergraduate years followed by the lectures and clinical work involving the student in the actual treatment of the aged. Many new graduates leave our dental schools without actually meeting or treating elderly patients.

A connection can be developed between our undergraduate clinical programs and the dental treatment of residents in nursing homes and other extended care facilities. There are such programs in existence, but only on a limited scale. These must be expanded and become an integral part of the dental undergraduate training.

We have a tremendous job on our hands.

Let's get on with it!

*Erwin Lightman, DDS
Toronto, Ontario*

DENTISTERIE POUR LES GENS ÂGÉS: UN PRESSANT BESOIN

Au cours des 28 dernières années, je me suis beaucoup occupé des soins dentaires accordés aux gens âgés. J'ai passé la plupart de ce temps au Centre de gériatrie Baycrest, à Toronto. Au début, le service dentaire était ouvert un matin par semaine, puis, l'institution se développant, trois matins par semaine.

Parmi les projets entrepris au Centre Baycrest, une étude a été faite pour déterminer les besoins des gens âgés en rapport avec les dentiers. Chaque patient accueilli à l'institution a été soumis à un examen dentaire. Basée sur 500 examens, l'étude a fourni des données qui, par extrapolation, ont été appliquées à la population des gens âgés en général.

Il va sans dire que les résultats indiquaient un pressant besoin de traiter ces gens. D'autres études menées par les Drs Banting, Martinello et Leake ont conduit aux mêmes conclusions. Chez nous, les vieillards ont grandement besoin de soins dentaires et, nous, membres de la profession dentaire, devons nous occuper de ce problème maintenant.

Il est temps que nous *arrêtons* les études et les enquêtes et que nous allions dans les maisons de repos, les asiles, les hôpitaux pour malades chroniques et les autres établissements semblables pour nous mettre au travail. Aux vieillards, tout semblerait un présent du ciel, même les traitements les plus simples comme les prophylaxies, les obturations à l'amalgame, les extractions, le soulagement des parties sensibles, le rebasage des dentiers mal ajustés et la correction de l'occlusion.

Pour les gens âgés, il est essentiel de pouvoir mâcher. Nous pouvons les y aider. Nous pouvons également leur redonner de l'amour-propre en remplaçant une dent qui leur manque ou en complétant leurs dentiers.

Notre meilleure alliée est l'hygiéniste dentaire, car elle peut rendre des services spéciaux aux vieillards habitant dans une institution. En plus d'être bien placée pour découvrir certains de leurs simples besoins et d'en informer le dentiste, elle peut voir à ce que leurs dents restent saines. Il est toujours important de conserver sa denture naturelle en bon état et, à mon avis, l'hygiéniste est l'une des principales personnes concernées pour l'administration de ce service.

Malheureusement, la profession dentaire a fermé les yeux sur les besoins des personnes âgées. Sur toute liste de priorités, le vieillard vient habituellement presque en dernier.

Nous pourrions sensibiliser la profession à ce problème en commençant avec les non diplômés. Dès les premières années d'études en dentisterie, on devrait donner des cours de gérontologie aux étudiants, puis des conférences et des travaux cliniques leur demandant de participer au traitement des vieillards. Plusieurs nouveaux diplômés quittent l'école dentaire sans avoir jamais rencontré ni traité un patient âgé.

On pourrait établir un lien entre les programmes cliniques pour non diplômés et les traitements dentaires qui se donnent dans les maisons de repos et les autres établissements hospitaliers. Pareils programmes existent déjà, mais seulement de façon restreinte. Il faut les développer et en faire une partie intégrante de la formation dentaire des non diplômés.

Une tâche considérable nous attend.

Le temps est venu de nous y mettre!

*Erwin Lightman, DDS
Toronto, Ontario*



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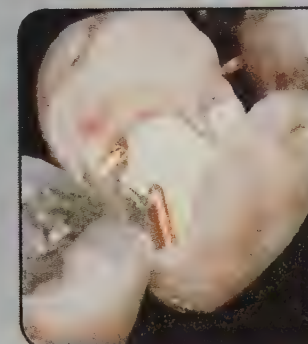
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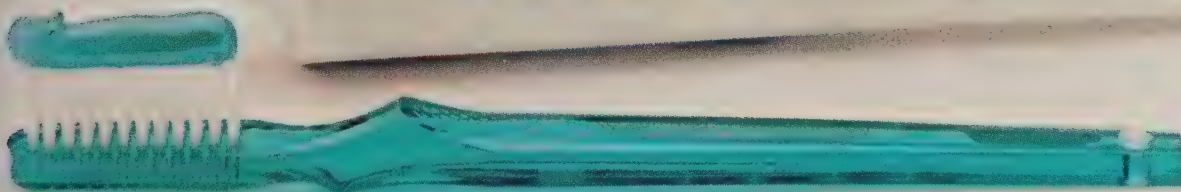
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Letter requires clarification

Dr. Clyde Covit's letter re FDI requires clarification by CDA. The implication is that the only advantage for CDA to belong to this organization is that "eight (8) Canadian consultants to FDI" have status. He infers also that CDA is paying travel and per diem expenses for delegates. The rationale that only individual dentists may profit from membership in this organization through annual meeting write-offs is a serious accusation. I would like to hear the other side of the argument — before I make up my mind as to whether to urge CDA to drop its affiliation or not.

On another subject which appeared above Dr. Covit's signature — "Survey of Health Insurance Benefits in Canada, 1980," I wonder if the title is misleading? At one time Blue Cross organizations across Canada were not members of CAASI. In Manitoba, as I expect all across Canada, Blue Cross writes and administers a large number of Dental Plans. If the figures presented in the article include Blue Cross statistics they are a fairly true picture of dental benefits all across Canada. If Blue Cross has been omitted, as have a number of other administrative organizations (-e.g.- Turnbull and Turnbull in Winnipeg, who administer dental plans for retail food and commercial workers, McLeod — Stepman, etc.), then the figures are not truly indicative of dental plan coverage in CANADA. The trend towards (ASO) Administrative Services only is increasing very rapidly — particularly amongst govt. workers' unions, crown corporation employees, and railway unions — (14 of them alone — numbering about 400,000 employees and dependents), who have received dental benefits in their contracts. All these numbers should be *accurately* put together in order to have the correct ammunition with which to argue the federal government's proposed tax on dental premiums.

When, originally, I did spade work in the Institution of Third Party Dentistry for Canadians it was with the purpose of postponing Govt. takeover of dentistry. Now I tremble for the elimination of dental plans for tax reasons, and the effect it will have on the economics of dental practice.

*Harry Tregobov, BSc., DDS,
FICD*

FDI benefits 'considerable'

The structure, organization, activities and rationale for CDA membership in the FDI were presented in the Nov. and Dec. 1981 CDA Journals. The following will answer Dr. Tregobov's specific questions and also further elucidate the benefits.

Canada, as one of 78 member countries, pays a corporate fee which allows Canadian participation in all FDI activities on commissions, committees and working groups and ensures input into and reception of, reports and surveys. It also allows Canada to send two official representatives to the congress in Austria in 1982. Such delegates will represent Canada at all congress meetings including voting representation at the General Assembly meetings where FDI policy is established. The Canadian delegates are not paid per diems.

With respect to consultants, Canada now has representation on all four commissions and in addition Dean Beagrie, of U.B.C. dental faculty, is the Chairman of the Commission on Dental Education and Practice. Canadian participation as consultants could be greater and will increase as interested, knowledgeable dentists are identified and nominated for specific commissions and working groups. When consultants attend congresses it is at their own expense but the majority of commission working group activities can be carried by correspondence.

The benefits which accrue to every member country in the FDI are considerable because of the direct asso-

ciation with the World Health and the International Standards Organization and in the exchange of information and development of scientific data which is disseminated to member countries as technical reports. There is, however, no question that the advantages to developing countries is most significant through the knowledge available from the input of the more established countries. Canada, being a highly developed country, has a great deal to offer and the FDI is the means through which such support can be disseminated.

W.R. Thompson, DDS

FDI Canadian National Treasurer

Comments were 'well taken'

Dr. Tregobov's comments are well taken regarding the CDA having the proper ammunition with which to combat the new federal legislation and its affect on Private Funded Prepaid Dental Plans.

The article, entitled, "Survey of Health Insurance Benefits in Canada, 1980," relates as indicated to the member companies of CLHIA and does not include, as I have indicated in previous articles summarizing the activities of the CAASI group, the various types of dental service corporations across the country.

I too would hope that the CDA Council on Health Care is assimilating the necessary statistics required for the CDA to effectively show the Federal Government how so many Canadians would be adversely affected as a result of their new policy.

*Clyde Covit, DDS
Montréal, Québec*

Shouldn't quarrel 'over nickels'

There are Canadian dentists who dislike Clyde Covit's cameo of condemnation of the Federation Dentaire Internationale in its entirety. (CDA Journal March, 1982)

There is much that is wrong with FDI, but it is by working with skilful diplomacy within the organization that beneficial changes can best be made. To threaten to leave over a few nickels and dimes when there are serious issues to be faced certainly jeopardizes Canada's credibility.

I guess I have attended as many FDI meetings as any other currently practising Canadian dentist, and I continue to do so when I possibly can because, above all the conflict which does exist, FDI is a forum where dentists from 100 countries can get together in a cordial fraternal relationship. In a world torn by tension, this accomplishment alone is to me worth paying more than that which may be considered by some to be our "share".

*Dr. David K. Peters
St. John's, Newfoundland*

Who benefits from the FDI

I have read with great interest the letter from Dr. Clyde Covit, published in the March 1982 issue of your Journal concerning membership in the FDI. Unfortunately, Dr. Covit seems to base many of his views on a basic misapprehension, namely that the work of the FDI benefits only those dentists in the member countries who are individual, Supporting Members of the FDI.

Nothing could be further from the truth. The major part of the Federation's activities are intended to be of benefit to the member associations and through them to all their members.

In his article entitled *Scientific Activities of FDI* in the December 1981 issue of your journal, Brigadier-General W.R. Thompson drew attention to the numerous studies carried out by the FDI Commissions which are of use to all practising dentists. The results of this work are published in a series of technical reports on such topics as mercury hygiene, radio-

graphic procedures, hygiene in the dental practice, acid-etching procedures, glass-ionomer cements and endodontic instruments, devices and materials.

The FDI takes up issues of overriding importance to the profession at large where international coordination of experience is essential.

Through its Commission on Dental Products the FDI has already developed in operation with the International Organization for Standardization (ISO) 26 international standards. These establish the quality of dental materials and certain items of equipment throughout the world. The FDI is responsible for the clinical aspects and the ISO for the physical aspects of these standards.

Other Commissions are investigating such problems as the changing pattern of oral health, the overproduction of dentists in industrialized countries, proper teamwork with auxiliaries, planning the most effective dental health education programs as well as other means of prevention.

As regards the Supporting Members, whilst they benefit from the right to attend FDI world congresses and receive the Newsletter, I do not believe that it is mainly these benefits which induce thousands of dentists round the world to become members and stay members for more than 20 years. We have found that they are colleagues who want to widen their horizons and learn about achievements and problems in other countries. Many are altruistic enough to want to support an organization whose work helps their colleagues in the developing countries. One of the great strengths of the FDI has been the idealistic spirit which, during the last 82 years, has led so many eminent dentists to give their time to commission work and so many practitioners to support this work through their annual subscriptions.

It would not be fair, however, to expect them to carry all the Federation's costs as Dr. Covit seems to suggest.

This is not to say that the FDI Council is at all complacent about the problems of financing the FDI. By the time this letter is published, the Executive Committee will have worked out a number of financial recommendations based on cost-effectiveness studies of the programmes of the FDI.

The men who founded the FDI in 1900 saw the need for a unified profession. With all the problems facing the profession this need is no less great today. We hope that Canadian dentists will continue to play an important part in raising the standards of the profession around the world and improving the service the profession provides.

*Thorsten Aggeryd
President, FDI, (Sweden)*

Publicity to France?

I wish to comment on the cover of the March 1982 C.D.A. Journal.

Is Canada exporting dental health month publicity to France? Are people who read this brochure in French who reside in Canada not Canadians?

Such covers cannot promote harmony within our great country.

*Bert J. Levin, DDS, MSC (Dent)
Toronto, Ontario*

Word of thanks

Thank you so much for sending our office copies of the recent Canadian Dental Association Journal with information on the brochure on the dialysis patient and the dentist. We have since received numerous requests from your membership for copies of the pamphlet, and therefore appreciate your advising Canadian dentists of this material.

*Shelley Paris
Director of Medical and
Patient Service Programs
Kidney Foundation of Canada*

Dental office contents damaged: What steps does dentist take?

In 1982, the Canadian Dentists' Insurance Program will receive more than 350 claims for loss or damage to dentists' offices across the country. The number of claims is increasing each year and the amount paid out in settlement is of course increasing as well. This increase is taking place for two reasons:

- The increase in the number of claims.
- The higher cost of repairs and higher cost of replacing equipment as well as supplies.

At CDSPI, we find that few dentists are aware of what takes place when a loss occurs. Who do you call? What do you have to do? What do others do for you? Why are there adjustors? When do I get paid? How can I replace the supplies or equipment if I don't have the ready cash? All of these questions will come to mind plus many more if you are unfortunate enough to experience a loss due to fire, water leakage, theft, or vandalism.

At a recent meeting with the claims manager at Guardian Insurance, we asked him for his comments. Here are a few remarks taken from that interview:

CDSPI

In your experience, what do you feel is a major factor in getting prompt settlement of a damage claim?

Claims Manager

If there was only one factor, all would be easy. Unfortunately, just about every claimant is unaware of the most basic procedures that will take place in order for us — the insurance company — to obtain information making it possible to settle the claim.

CDSPI

Oh! Oh! What was a simple question gets complicated. What should a dentist do, say, if on a Monday morning he finds an inch or so of water on the floor of his office. He

also discovers that water has damaged the computer in the bank located below his office?

Claims Manager

He should check to make sure the main shut off valve in the plumbing system is in the "closed" or "shut off" position.

Secondly, advise the building owner and attempt to mop up or clean up the mess.

Next, call CDSPI or the adjustors.

CDSPI

The dentist has called CDSPI, received the telephone number of the adjustors; he has called them and they are on their way to meet with him and to inspect the damage. What happens next? What will the adjustor do?

Claims Manager

The adjustor is hired by the insurance company to gather the facts, interview witnesses, assess the loss and to submit a full report including estimates for repairs and replacement of damaged equipment or furnishings. The adjustor will know of people able to come in to do mopping up and drying out of carpets, etc.

CDSPI

Within a short time, maybe just a few hours, work can commence aimed at getting the dental office operational. Is that correct?

Claims Manager

Yes, everyone is interested in keeping the "down time" to as few hours or days as possible.

CDSPI

Delays in claim settlement will occur. What causes these delays? What should a dentist do to avoid them?

Claims Manager

There is no magic formula to solve this problem. If I am permitted to give advice, here is what I would say:

- a) Be sure you are adequately covered.

That means be aware of the cost of replacing equipment, furnishings

and supplies at today's prices.

- b) Insure for at least 80 per cent of the cost of replacement otherwise we have to apply the co-insurance clause of the contract. If you insure for only 50 per cent of the cost of replacement co-insurance means we only pay 50 per cent of the claim. You the dentist, are self insuring the other 50 per cent.

- c) If you suffer a loss and your insurance coverage is at least 80 per cent or more, then, we pay the full cost of repairs or replacement. Invoices **must be** presented to prove that replacement has in fact taken place.
- d) Keep an inventory of equipment, furnishings and supplies making sure that a copy of the document is filed away from the office. Photographs of each room of the office can be a big help in establishing the loss.

CDSPI

Let's say that due to theft, a dentist lost an electric typewriter, a large quantity of supplies, a stereo system and other items. The loss may be several thousand dollars and finding ready cash to replace these items may be hard to find. What then?

Claims Manager

No problem — if we know what the situation is, we will issue our cheque jointly to the dentist and the supplier or we will arrange to have the equipment delivered and we will pay the supplier directly.

CDSPI

If a dentist has a loss and decides not to replace the piece of equipment (for example, thieves take a sound system that cost \$1,500 a year ago) what happens?

Claims Manager

If the dentist decides not to replace the stereo, we will settle for an amount taking into account the depreciated value of that piece of equipment. We issue a cheque to the dentist for that amount.

CDSPI

The information you have provided may be basic but will be helpful. Would you like to close with a comment on loss prevention?

Claims Manager

Loss prevention is a topic we could discuss for hours but let me say this. A dentist can do some simple things to prevent a loss. For example:

1. Know his equipment, particularly the water connections to his chair.

What type of connection is it? Press on plastic connectors or clamp on? Clamp on is preferable.

2. Don't leave valuables about. An expensive watch, ring or other jewellery should be under lock and key when not worn.

3. Provide a safe place for patients to leave personal effects such as a coat. So many losses take place in winter time because a coat rack is placed near an open doorway — that is just asking for trouble.

4. Have good quality locks installed on all doors. An alarm system is also a good deterrent if the office is on the ground floor where access to windows is easy.

5. Carry adequate insurance coverage. Paying the premium will be a great deal less costly than paying for a loss.

6. Always turn off the water supply to equipment at the end of the day as the water pressure invariably increases overnight.

CDSPI

Thank you, could we do this again and perhaps get your views on other areas of general insurance? I am thinking specifically about earnings insurance.

Claims Manager

Of course, anytime. Earnings insurance or business interruption insurance is a good subject. I dare say it is a subject that generally is more obscure than problems concerning theft or fire loss.

CDSPI hopes this article has provided you with information you can use in order to protect yourself against a claim for water damage or theft.

If more details are needed, please contact CDSPI. Watch for further articles to assist you with your day to day insurance requirements.

Motrin[®]

(ibuprofen) tablets

Product Information

Action: Ibuprofen has demonstrated anti-inflammatory, analgesic and antipyretic activity in animal studies designed to specifically demonstrate these effects. Ibuprofen has no demonstrable glucocorticoid effect.

Following a single 200 mg dose of ibuprofen in humans, useful blood levels were demonstrable in 45 minutes and still present in six hours but at barely detectable levels. Peak levels occurred at approximately one hour after ingestion. Levels were lower when taken in conjunction with food.

Ibuprofen is rapidly metabolized and eliminated in the urine. The excretion of ibuprofen is virtually complete 24 hours after the last dose. The serum half-life of ibuprofen is 1.8 to 2 hours. There is no evidence of drug accumulation or enzyme induction.

Ibuprofen has been found to be less likely to cause gastro-intestinal bleeding in doses usually used than is acetylsalicylic acid.

Clinical trials in man have shown activity of a dose of 1200–1800 mg of ibuprofen daily to be similar to that of 3.6 grams of acetylsalicylic acid daily.

Indications and Clinical Uses: Motrin (ibuprofen) is indicated for the treatment of rheumatoid arthritis and osteoarthritis. Motrin is also indicated for the relief of mild to moderate pain accompanied by inflammation in conditions such as musculo-skeletal trauma and post-dental extraction. Motrin is also indicated for the relief of pain associated with dysmenorrhea.

Contraindications: Motrin (ibuprofen) should not be used in patients who have previously exhibited hypersensitivity to it, or in individuals with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to acetylsalicylic acid or other nonsteroidal anti-inflammatory agents. (see WARNINGS)

Motrin should not be used during pregnancy, in nursing mothers or in pediatric patients because its safety under these conditions has not been established.

Warnings: Anaphylactoid reactions have occurred in patients with known A.S.A. hypersensitivity (see CONTRAINDICATIONS)

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported in patients receiving Motrin (ibuprofen). Peptic ulceration, perforation, or severe gastrointestinal bleeding can have a fatal outcome, and although few such reports have been received with Motrin, a cause and effect relationship has not been established. Motrin should be given under close supervision to patients with a history of upper gastro-intestinal tract disease.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in colour vision have been reported. If a patient develops such complaints while receiving Motrin (ibuprofen), the drug should be discontinued and the patient should have an ophthalmologic examination. Fluid retention and edema have been reported in association with Motrin; therefore, the drug should be used with caution in patients with a history of cardiac decompensation or renal disease.

Motrin, like other nonsteroidal anti-inflammatory agents, can inhibit platelet aggregation but the effect is quantitatively less and of shorter duration than that seen with acetylsalicylic acid. Motrin has been shown to prolong bleeding time (but within the normal range) in normal subjects. Because this prolonged bleeding effect may be exaggerated in patients with underlying hemostatic defects, Motrin should be used with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients on Motrin should be cautioned to report to their physicians signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

When Motrin is added to the treatment program of patients who have been on prolonged corticosteroid therapy, and it is decided to discontinue this therapy, the corticosteroid should be tapered slowly to avoid exacerbation of disease or adrenal insufficiency.

Aseptic meningitis has been reported in connection with Motrin therapy in patients with systemic lupus erythematosus. Such patients may also develop hypersensitivity reactions to Motrin such as fever, rash or abnormal liver function more often than those with other disorders. Caution should therefore be exercised when considering Motrin therapy for patients with systemic lupus erythematosus.

Drug Interactions

Coumarin-type anticoagulants: Several short-term controlled studies failed to show that Motrin significantly affected prothrombin times or a variety of other clotting factors when administered to individuals on coumarin-type anticoagulants. However, because bleeding has been reported when Motrin and other nonsteroidal anti-inflammatory agents have been administered to patients on coumarin-type anticoagulants, the physician should be cautious when administering Motrin to patients on anticoagulants.

A.S.A.: Animal studies show that A.S.A. given with nonsteroidal anti-inflammatory agents including Motrin yields a net decrease in anti-inflammatory activity with lowered blood levels of the non-A.S.A. drug. Single dose bioavailability studies in normal volunteers have failed to show an effect of A.S.A. on Motrin blood levels. Correlative clinical studies have not been done.

Adverse Reactions: The following adverse reactions have been noted in patients treated with Motrin (ibuprofen):

Note: Reactions listed below under Causal Relationship Unknown are those which occurred under circumstances where a causal relationship could not be established. However, in these rarely reported events, the possibility of a relationship to Motrin cannot be excluded.

Gastrointestinal: The adverse reactions most frequently seen with Motrin therapy involve the gastrointestinal system.

Incidence 3 to 9%: nausea, epigastric pain, heartburn

Incidence 1 to 3%: diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the gastrointestinal tract (bloating or flatulence)

Incidence less than 1%: gastric or duodenal ulcer with bleeding and/or perforation, gastrointestinal hemorrhage, melena, hepatitis, jaundice, abnormal liver function (SGOT, serum bilirubin and alkaline phosphatase)

Central Nervous System

Incidence 3 to 9%: dizziness

Incidence 1 to 3%: headache, nervousness

Incidence less than 1%: depression, insomnia

Causal relationship unknown: paresthesias, hallucinations, dream abnormalities

Dermatologic

Incidence 3 to 9%: rash (including maculopapular type)

Incidence 1 to 3%: pruritus

Incidence less than 1%: vesiculobullous eruptions, urticaria, erythema multiforme

Causal relationship unknown: alopecia, Stevens-Johnson syndrome

Special Senses

Incidence 1 to 3%: tinnitus

Incidence less than 1%: amblyopia (blurred and/or diminished vision, scotomata and/or changes in colour vision). Any patient with eye complaints during Motrin therapy should have an ophthalmological examination (see PRECAUTIONS)

Causal relationship unknown: conjunctivitis, diplopia, optic neuritis

Metabolic

Incidence 1 to 3%: decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS)

Hematologic

Incidence less than 1%: leukopenia and decreases in hemoglobin and hematocrit

Causal relationship unknown: hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes (e.g. purpura, epistaxis, hematuria, menorrhagia)

Cardiovascular

Incidence less than 1%: congestive heart failure in patients with marginal cardiac function, elevated blood pressure

Causal relationship unknown: arrhythmias (sinus tachycardia, sinus bradycardia, palpitations)

Allergic

Incidence less than 1%: anaphylaxis (see CONTRAINDICATIONS)

Causal relationship unknown: fever, serum sickness, lupus erythematosus syndrome

Endocrine

Causal relationship unknown: gynecomastia, hypoglycemic reaction

Renal

Causal relationship unknown: decreased creatinine clearance, polyuria, azotemia

Symptoms and Treatment of Overdosage: A nineteen month old child weighing 12 kg ingested from 2800 to 4000 mg of Motrin (ibuprofen) and presented with apnea, cyanosis and responded only to painful stimuli. Oxygen and parenteral fluids were given and at 12 hours she appeared completely recovered. Two other children (10 kg each) ingested 1200 mg of Motrin each and there were no signs of acute intoxication or late sequelae. A 19 year old male who had ingested 8000 mg of Motrin reported dizziness, and nystagmus was noted. He recovered with no reported sequelae after parenteral hydration and three days' bed rest.

In cases of acute overdosage, the stomach should be emptied by vomiting or lavage, though little drug will likely be recovered if more than an hour has elapsed since ingestion. Because the drug is acidic and is excreted in the urine, it is theoretically beneficial to administer alkali and induce diuresis.

Dosage and Administration: Rheumatoid arthritis and osteoarthritis. The initial daily dosage in adults is 1200 mg divided into 3 or 4 equal doses. Depending on the therapeutic response, the dose may be adjusted downward or upward. The daily dosage should not exceed 2400 mg.

Maintenance therapy, once maximum response is obtained, will range from 800 to 1200 mg per day.

Mild to moderate pain accompanied with inflammation, dysmenorrhea. 400 mg repeated as required every 4 to 6 hours. The daily dosage should not exceed 2400 mg.

Children: Due to the lack of clinical experience, ibuprofen is not indicated for use in children under 12 years of age.

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Drug addict "patients" a growing problem

For some time, medical practitioners have been the targets of conniving drug addicts, using health problems as excuses for prescriptions for controlled drugs and narcotics.

Now dentists are facing the problem.

This abuse has become "a serious situation" according to a warning issued recently to dental registrars by Mr. Jacques G. LeCavalier, Director, Bureau of Dangerous Drugs, Health Protection Branch, Health and Welfare Canada.

Monitoring by the staff of the Bureau, may have removed some of the pressure from the medical profession.

"We have noticed that the problem has become more prevalent with dentists since early 1981," said Mrs. Denise Boucher, Chief of the Domestic Control Division. "When we put the lid on (medical profession problem), it seems to pop up somewhere else." She admitted it may well be that some of the same addicts have been diverted toward dentists, as a result of the more intense surveillance.

"Monitoring the distribution of narcotics and controlled drugs, we note that these drugs are being prescribed more frequently by dentists," Mr. LeCavalier states.

"Often, in response to a Department enquiry, the dentist will advise that the person for whom the drugs were prescribed visited his office during a busy time, complaining of pain. It is apparent that the dentist has frequently prescribed without first having examined the patient. Habitual drug users are very skillful at simulating symptoms, to obtain narcotics and controlled drugs, and, in addition, some have discovered that they can take advantage of the dentist's empathy. Repeatedly, Mr. LeCavalier noted, "we have determined that these persons are only seeking sources of

drugs to support their addiction, or for profitable resale."

Mrs. Boucher said dentists are often duped by these addicts' other health problems. The addict's teeth are very often in poor condition anyway, and requests for suppressants may appear to be quite bona fide.

Use old tricks

In some of the cases on the record, dentists have been conned into prescribing stronger than usual narcotics. The addicts have used the old trick of playing one practitioner against another. They approach the dentist at a busy time, appealing for emergency medication, and tell him that another dentist (or doctor) has previously prescribed a drug that "worked great." The dentist has been too busy to check the validity of the claim with a fellow practitioner. An appointment is made for examination and possible treatment, but the "patient" doesn't keep the appointment.

"A dentist therefore must use extreme caution when an individual unknown to him requests a specific medication or a prescription for any of these drugs," warns Mr. LeCavalier.

"We would also like to emphasize that the Narcotic Control Regulations, as well as those respecting controlled drugs, state that the practitioner may only administer, prescribe, give, sell or furnish a narcotic or controlled drug to a person or animal:

- a) If the person or animal is a patient under his professional treatment; and,
- b) if the narcotic or controlled drug is required for the condition for which the person or animal is receiving treatment.

With respect to dentists, the prescribing of these drugs must therefore

be limited to dental conditions. We are certain that we can count on the co-operation of dentists in order to prevent the abuse," said Mr. LeCavalier.

Worse in West

The problem has not struck in all parts of Canada with equal severity, Mrs. Boucher said. "It has been more prevalent in the Prairie provinces — Alberta, Saskatchewan and Manitoba. And it has now been detected in Québec. We feel the alert should be sounded before it gets any worse."

Bureau of Dangerous Drugs personnel discover most incidents of abuse through checking prescription files of pharmacists and other licenced drug dealers.

The practitioner who appears to have been prescribing unusual levels of controlled drugs or narcotics is then approached and warned to be "more careful before they prescribe," Mrs. Boucher said.

A few practitioners have caused concern, she said, when they give the "bad answer — 'I can't say no.' If they have that problem, they're in trouble. The dentist must justify what he is doing. He has the full responsibility."

Inspectors may also get tips about drug abuse incidents from concerned family members, other professionals, or from police or other law enforcement agents. Police on occasion will pick up an addict who has made the remark: "Go to Doctor X, he'll give you a prescription."

When the problem began to surface in the early months of 1981, the Bureau of Dangerous Drugs moved to apply a measure of control by re-scheduling certain products containing oxycodone and hydrocodone, as straight narcotics. They may now only be prescribed in writing, not by telephone.

Ten questions your patients may ask about the new low-calorie sweetener, NutraSweet™

Recently, foods and beverages made with a completely new kind of food sweetener, NutraSweet* aspartame sweetener, were introduced in the marketplace. Here are the answers to some of the most frequently asked questions about this revolutionary new product.

1. Exactly what is NutraSweet?

NutraSweet is not a sugar. NutraSweet is a sweet, nutritive substance made of protein components like those found naturally in most foods. It is a sweet compound of two amino acids, aspartate and phenylalanine.

2. What foods are made with NutraSweet?

A variety of foods are made with NutraSweet: carbonated soft drinks, pre-sweetened cereals, instant puddings and dessert toppings, flavored crystal beverages and chewing gum.

Equal® (Égal® in French), the new low-calorie tabletop sweetener in packets and tablets, is also made with NutraSweet.

3. Can NutraSweet reduce calories in foods?

NutraSweet sweetens with far fewer calories than sugar. For example, a teaspoon of sugar contains 16 calories. NutraSweet delivers equivalent sweetness with only 1/10 of one calorie. That means, in some foods made with NutraSweet, *calories may be reduced as much as 95 percent* (see chart below).

4. Can children have foods made with NutraSweet?

Unlike many non-nutritive sweeteners, NutraSweet has been clinically tested with people of all ages.** If a person consumes an amount of NutraSweet equivalent in sweetness to one teaspoon of sugar, he takes in 8.5 mg. of aspartate and 10.6 mg. of phenylalanine. By way of comparison, he takes in 50 times

these amounts when he drinks an 8 oz. glass of milk.

5. Are foods made with NutraSweet more nutritious?

Sometimes. For example, a pre-sweetened cereal made with NutraSweet can offer more protein,



fiber, vitamins and minerals per serving than the same size serving made with sugar. That's because sugar's bulk and calories can be replaced with more cereal grain.

6. Can NutraSweet help reduce tooth decay?

Too many sweets in the diet, combined with poor dental habits, contribute to tooth decay. While diet is only one factor, substituting foods made with NutraSweet for sugar-sweetened foods may help to reduce cavities.

Supporting this theory are studies conducted by the U.S. National Institute of Dental Research that showed use of NutraSweet was not associated with the formation of cavities in animals***.

7. Can persons with diabetes eat the foods made with NutraSweet?

NutraSweet is wel-

come news for persons with diabetes because it is digested and utilized by the body as protein. That means some foods and beverages formerly high in sugar may soon be enjoyed because with NutraSweet most beverages will be totally sugar-free and other foods will be significantly reduced in carbohydrates.

8. Can pregnant women use NutraSweet?

On the basis of animal and clinical studies, Health and Welfare Canada concluded that NutraSweet does not present an additional risk to pregnant women.

The amino acids from NutraSweet will be less than 1% of the total protein consumed over a day. And, consuming foods and beverages made with NutraSweet is just like eating other foods containing the same protein components.

9. Does NutraSweet really taste like sugar?

In two separate studies conducted at a leading university in New York, people were fed a diet that contained sugar-sweetened foods. Occasionally, foods sweetened with NutraSweet were substituted without the subjects' knowledge. Most subjects could not tell the difference between the foods sweetened with NutraSweet and the same foods sweetened with sugar.

10. Can NutraSweet help me control my weight?

Eating foods made with NutraSweet allows you to reduce your daily calorie intake, yet still satisfy your sweet tooth. And because foods made with NutraSweet taste like high-calorie foods, they can help make even a restrictive diet more palatable.

*NutraSweet is a brand name of G.D. Searle & Co. for the sweetener aspartame (APM).

**NutraSweet contains phenylalanine. Physicians with phenylketonuric patients may request additional information on foods made with NutraSweet by calling (1-800) 268-1120 and in British Columbia (112-800) 268-1120.

***Copies of this study may be obtained by calling the 800 telephone number mentioned above.

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Compare the difference in calories:

Food	Containing Sugar	Containing NutraSweet
Hot chocolate (8 oz.)	116 calories	64 calories
Carbonated soft drink (10 oz.)	120 calories	1 calorie
Gelatin dessert (½ cup)	81 calories	10 calories
Whipped topping (4 Tbsp.)	56 calories	28 calories
Chocolate pudding (½ cup)	150 calories	75 calories
Milk shake (1½ cups)	284 calories	135 calories

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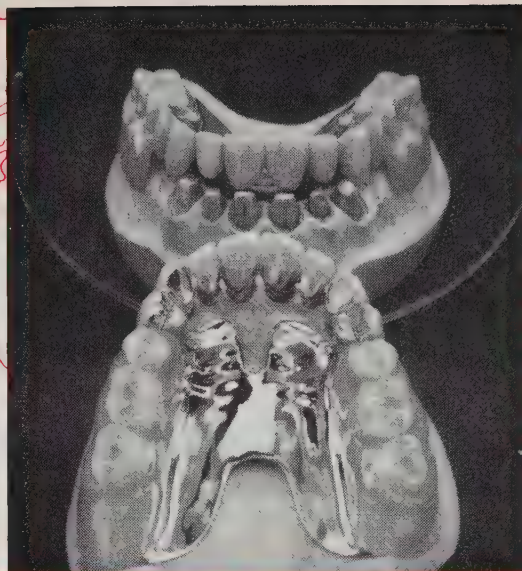
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356 Rue Principale

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Amiga Dental Lab.

3400 Jean-Talon West

Dentarium Laboratories

6997 Victoria Avenue

Nobident Dental Laboratory

3726 Jean-Talon West

Roger Sauve Dental Laboratory

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G. Garneau Dental Lab.

386 Dorchester, Sud

R. Laverdiere Dental Laboratory

613 Rue Cyrille Ouest

NEWFOUNDLAND — ST. JOHN'S

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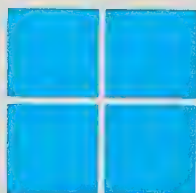
10 ways to pay less for insurance ... and get better protection

It's easy to spend \$2,000 a year or more on insurance — and still not have adequate protection. If you want better protection for less money, here are 10 things to think about:

1. Many agents like to sell life and disability policies with "level" premiums — premiums that don't increase as you grow older. In effect, you're overcharged today so you can pay less tomorrow. In a high-inflation period, that works for the insurance company. Usually, it's cheaper for you to buy a "step-rated" policy — one where the premium does increase as you grow older. The step-rated policy always gives you coverage for a lower cost in the early years — and you can use the saving to good advantage for debt reduction or investment.
2. Consider paying your premiums quarterly, rather than annually. At today's interest rates, keep the money in the bank as long as you can. There's no increased cost to you if you pay premiums quarterly to the Canadian Dentists' Insurance Program.
3. Low deductibles mean higher premiums. On your office contents insurance, for example, you can save 10-15% of premium costs by increasing your deductible from \$250 to \$500. The same principle applies to insurance on your car and home.
4. Keep an accurate and up-to-date inventory of the contents of your home and office. Otherwise, you may forget some items when making a claim after a serious loss.
5. Disability policies pay benefits during sickness and accident only after a "waiting period". The shorter the waiting period, the higher the premium. Consider shifting to a longer waiting period and using the saving for investment or for increasing your basic coverage to a more adequate level.
6. Insurance is a competitive industry and costs vary from policy to policy and company to company. You can save substantial amounts if you shop around. Through its insurance consultants, CDSPI can help you understand the differences in two competing policies so you can make valid cost comparisons.
7. Life insurance policies which combine "savings" with "protection" often mean high-cost protection, low-return on your savings, and more difficulty in understanding exactly what you've got. In most cases, you'll be better off if you stick to term life insurance and set up a separate savings and investment program.
8. The most expensive insurance of all is insurance that doesn't provide enough coverage after a major loss. So keep your coverage up to date: remember to insure your property for the cost of replacing it at today's prices. When renewing, be sure to add the value of any new property to the total amount of coverage.
9. Even with adequate coverage, loss or damage to property will cost you time and money. You can help prevent office losses by a few simple steps: proper locks, doors, and windows on your office; and making sure water supplies to your chair are turned off before you leave.
10. Don't buy insurance at all if you can afford the loss. Concentrate on insuring yourself against major losses which could cripple you financially.

An important service of the Canadian Dentists' Insurance Program is to provide help and information on insurance matters to members of the profession. We'll have our insurance consultants evaluate any insurance proposal or help you assess your own needs.

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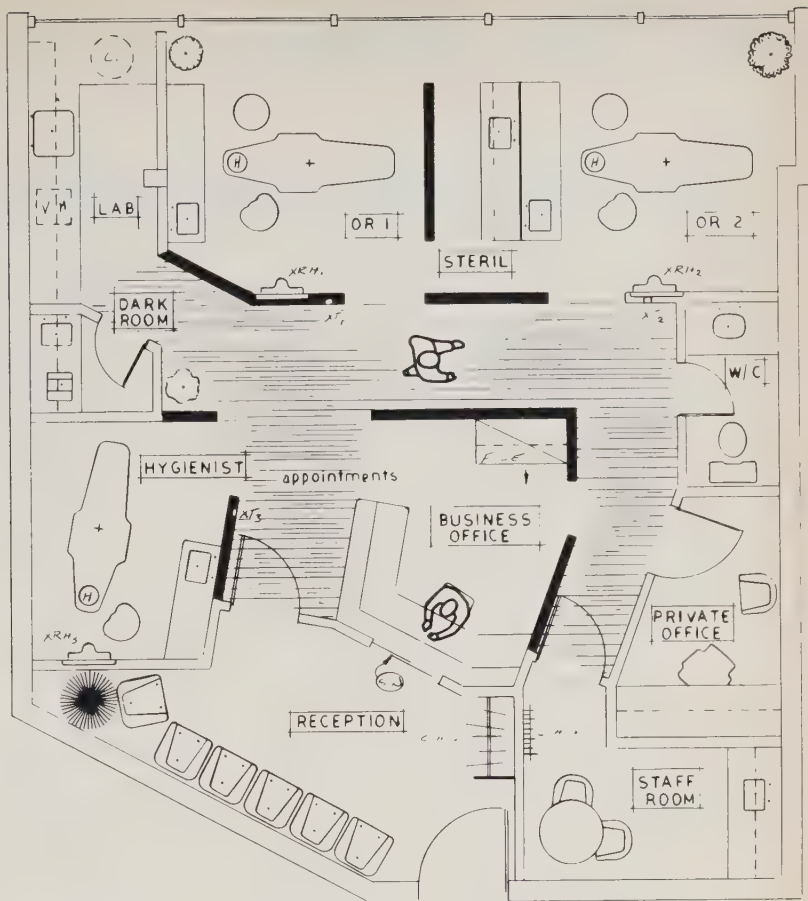


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number of operatories, the necessary staff and office space, your equipment needs, how big the reception area and recovery room, how much storage space - we'll take it from there.

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The plan shown is an actual plan prepared for a dentist in Windsor, Ontario, it's just one of over 300 plans we will do this year for dentists across Canada.

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B.C. dental health survey reveals marked improvement

A marked improvement in the dental health of children in British Columbia over the past 20 years was indicated in results of a 1980 dental survey conducted by the Division of Dental Health Services, Ministry of Health, of that province.

The most dramatic revelation was the reduction in the number of teeth lost through extraction. The recently released report of the survey showed, that, for example, the average number of extracted teeth in 15-year-olds was reduced from 1.1 in 1958-60 to 0.6 in 1967-74, and to 0.1 in 1980.

The extent of dental disease, measured in counts of decayed, missing and filled teeth, has been reduced from 12.4 in 1958-60, to 10.0 in 1967-74 and to 6.9 in 1980 — a reduction of 44 per cent.

Writers of the report concluded that the amount of untreated disease "would seem to be well within the ability of our present dental profession to cope with, over all regions of the province."

The dental health of 8,268 children, aged five, nine, 13 and 15 was surveyed in the study, in which it was found that a majority of children are receiving proper dental treatment.

The level of oral hygiene was shown to be improving, in general, and certainly, with age. Findings indicated a direct correlation between the level of oral hygiene and the amount of periodontal disease. The incidence of serious periodontal disease is low, the report states, and therefore "most periodontal disease present is still completely reversible if children and parents develop good preventive dental care lifestyles."

Quantitative index

A quantitative index was used to classify children according to the seriousness of their need for orthodontic treatment. This is the first time any provincial dental health survey

has used such an index. This method revealed that apparently three to four per cent of children in the province have handicapping malocclusions which present serious physical problems. A further five per cent have malocclusions which would be "highly desirable to correct." Thirteen per cent of children in the age group studied are already under orthodontic treatment. But these may not be the children with the worst malocclusions, the report states.

The study attributes improvements in the area of dental health to such factors as improved public health programs, a preventive approach by a stronger dental profession, greater awareness on the part of both parents and children as to how they can prevent disease, fluoride toothpaste and fluoridation of water supplies.

In measuring completed restorative treatment, the survey revealed that the level of treatment rises by age. For the combined regions of the province, it rises from 66.5 for the nine-year-olds to 77.4 for 13-year-olds and finally to 81.4 for the 15-year-old group. An analysis of the findings led report writers to comment: "generally speaking, it can be said that the majority of treatment needs are being met in this province."

Tooth mortality decline

Survey analysts concluded that "the most encouraging" aspect of the findings was in the area of tooth mortality. In the previous survey, there was an average of 20 missing permanent teeth among 100 nine-year-old children. In 1980, there was only one permanent tooth missing among the same number of children of this age. In the combined 1968-74 surveys, an average of 50 permanent teeth were missing among 100 13-year-old children, whereas in this survey (1980) the figure had been reduced to eight permanent teeth. In the 15-year-old cate-

gory, this figure dropped from 80 to 14 per 100 children.

The percentage of children not requiring treatment has risen in each age group in each of the three surveys. In 1958/60, for example, 35.6 per cent of five-year-olds had no caries defects, while in 1980, that percentage had risen to 63.16. Correspondingly, in the 1958/60 study, only 15.0 per cent of 15-year-old children did not require any dental treatment, and 57.93 per cent of them were in this category in 1980.

The objectives of the survey were:

1. To assess the dental health status of specific cohorts of children through estimation of the prevalence of dental caries, periodontal disease, occlusal disharmonies, dento-facial anomalies and other pathological lesions.
2. To identify regional variations in the prevalence of dental disease and dental anomalies.
3. To measure the extent to which present dental health services are meeting the need for dental treatment and to determine a measure of the unmet dental need in the child population.
4. To provide baseline data for future evaluation of the outcome, resulting from preventive and curative dental services publicly funded through programs such as the Dental Health Care Plan of British Columbia.
5. To meet basic dental research needs of the Ministry of Health.
6. To make ongoing comparisons with provincial health surveys, where possible.

The survey took place in the year immediately preceding the introduction of the Dental Health Care Plan of British Columbia, on January 1, 1981.

The coordinator and project manager was Dr. H. Jack Hann, Regional Dental Consultant, Vancouver Island.

U.S. Appeals Court upholds three-level membership

The three-level membership structure of organized dentistry has been upheld by a U.S. federal appeals court, which affirmed a lower district court's ruling on a lawsuit challenging the federated membership system.

The appeal decision — filed March 24 in the U.S. Court of Appeals for the Ninth Circuit — upholds the ruling of a U.S. District Court that the requirement that a dentist desiring association membership must belong at all three levels (local, state and national) does not violate antitrust laws.

Filed by four Arizona dentists in 1972, the lawsuit *Boddicker vs Arizona State Dental Association, et al.* was an attempt to disengage the federated membership of dentistry's component, constituent and national associations on antitrust grounds. The suit named as defendants the Central Ari-

zona Dental Society, the Arizona State Dental Association and the American Dental Association.

In the appeals ruling, the appellate judges upheld the federal district court's rejection of the appellants' contention that the membership link between the defendant organizations constituted an illegal tie-in arrangement that violates the Sherman Antitrust Act.

The Court held that since the ADA "is a unique organization to which no other is comparable, there would appear to be no market in the 'tied product' — ADA memberships — for the challenged membership requirements to restrain" and that "the relationship of the defendant organizations strongly suggests that membership in the local and state groups cannot be characterized as a product or

service distinct from ADA membership."

"Even if ADA membership is a product distinct from membership in the ADA's constituent and component societies," the Court continued, "the latter derive no economic benefit from sales of ADA memberships, the alleged 'tied product,' so that no per se illegal tying arrangement can be found."

The court further noted that the appellants failed to demonstrate any adverse effect on competition between dentists caused by the challenged three-tier membership requirement.

It also found that the defendant organizations have not monopolized the practice of dentistry in Arizona, since they, in fact, do not engage in the practice of dentistry, and membership in them is not a precondition for an Arizona dental license.

Obituaries

CLARKE, Percy: Dr. Clarke, who practised in St. Stephen, New Brunswick for 52 years, was born in 1893. A McGill University graduate, he was a past president of the New Brunswick Dental Society.

KENNEDY, Verne William: April 12, 1982. Dr. Kennedy was born October 16, 1900 and graduated from the University of Toronto in 1941. He practised for 20 years in Calgary, from 1961-66 at the Alberta Hospital, and from 1966-80 in Edmonton. Dr. Kennedy was a life member of the CDA.

ROULSTON, F.M.: Dr. Roulston of Sudbury, Ontario, was born in 1904 and graduated from the University of Toronto in 1929. He was a life member of the CDA.

Human jaws are shrinking

Today man's jaws and teeth are smaller than those of his prehistoric ancestor. And, Dr. David Marshall predicts, they will get even smaller and the teeth may eventually decrease in number.

The Syracuse, N.Y. odontologist-cum-evolutionist attributes the change to man's modern diet.

"As we progress on the evolutionary scale, our jaws and teeth are getting smaller. What is happening is that our food is softer. Prehistoric man had to eat coarse food and therefore had to use his jaws (to a greater extent). Due to a lack of function (because of our soft diet) our jaws are getting smaller," he said.

During the 2,750 million years of man's evolution, his head has become broader and larger, the skull and facial bones thinner and the jaws smaller.

Dr. Marshall has been studying the

evolution of the human skull for close to 40 years.

The man of the future, he says, will have fewer teeth, small jaws and a more prominent chin.

"The palate and dental arch are shortening and widening... Reduction in the massiveness of the face, with the reduced breadth and length of the jaws, leads to fewer teeth... The chin will be more prominent, and the jaws will be more moderate, less regular, and smaller because of the lack of function.

"The teeth will tend to be smaller, fewer in number, and even less regular than now in eruption and position. Because he will have fewer teeth, future man will have less trouble with their eruption," Dr. Marshall wrote back in 1975 in his article "Changes in the skull — past, present, and future — because of evolution", published in JADA.

In the News

Briefly —

The Faculty of Dentistry, University of Manitoba, recently received a grant of \$150,000 through the Lorne Edgar MacLachlan Charitable Trust.

The grant will encourage the development of a graduate/postgraduate program in Prosthodontics, including Maxillo-facial Prosthodontics, within the Faculty of Dentistry.

It will also aid in the development of a program which would be unique in Canada, under the direction of Dr. W.B. Love, Professor of the Department of Rehabilitative Dental Science.

This program of study will educate and train individuals for academic appointments, where available, research activities, as well as clinical skills in accordance with specialty requirements within the broad scope of Prosthetic Dentistry.

From the beginning of the Faculty of Dentistry in 1958, Dr. MacLachlan has supported the discipline of Removeable Prosthodontics in various ways. He arranged funding for a gold medal, awarded to an undergraduate student demonstrating proficiency in Removeable Prosthodontics. Dr. MacLachlan also established an endowment fund with the University of Manitoba, to encourage the ongoing education of staff within this discipline.

Dr. Anthony Melcher, Director of the MRC Group in Periodontal Physiology, Faculty of Dentistry, University of Toronto, was installed as president of the 5,000-member International Association of Dental Research at its annual meeting in New Orleans March 18-21, 1982. At the same meeting, Dr. A.R. Ten Cate, dean of the faculty, was elected to the vice-presidency. Dr. Ten Cate will thus assume the presidency in 1984.

The University of Toronto's Faculty of Dentistry has established a unique record in that, since the Association was founded in 1919, four of its members have, or will have, served

as presidents of the International Association. Dr. A.E. Webster served as the Association's third president and Dr. George Beagrie served in 1977-78. Dr. A.H. Melcher is currently in office and Dr. A.R. Ten Cate will serve in 1984-85. In addition, a distinguished Toronto alumnus, Dr. Jack McDonald, served as president in 1968-69.

Quebec City dental researcher, Dr. Christian Mouton, a microbiologist and immunologist in the faculty of dental medicine at Laval University, says the next best thing to brushing after meals, is chewing.

Chewing stimulates production of saliva, which washes sugar off teeth and reduces the acidic environment that sugar and decay-causing bacteria create.

The 1980-81 annual report of the Saskatchewan dental plan reveals that overall enrolment is high, with 129,669, or 83.5 per cent of the eligible children, between the ages of four and 15.

The majority of the children received comprehensive dental care from teams of dentists, dental therapists and dental assistants in the 505 dental clinics situated within elementary schools throughout the province. Private dental practitioners also provided referred emergency services to children enrolled in the plan, which cost \$348,000.

Total expenditures for the 1980-81 program were reported to be \$10.9 million, or an average cost of \$77.40 per enrolled child.

Hoffman-La Roche Limited of Vaudreuil, Quebec, warn that their product Rocaltrol, a recently introduced product on the Canadian market, is not intended for use as a vitamin D supplement for "any purely dental condition."

Use of this product, without appropriate medical precautions, could be life-threatening for the patient, Dr. Sheila McKenzie, professional services manager of the company's pharmaceutical branch, says.

In a letter to the CDA, Dr. McKenzie says that Rocaltrol (calcitriol) is a very potent active metabolite of vitamin D. It is prescribed for the management of either hypocalcemia and osteodystrophy in patients with chronic renal failure undergoing dialysis, hypocalcemia and its clinical manifestations associated with post-surgical hypoparathyroidism, idiopathic hypoparathyroidism and pseudo-hypoparathyroidism, or vitamin D-resistant rickets.

Adequate laboratory facilities for monitoring blood and urine chemistries must be available for patients being treated for these conditions. During treatment, progressive hypercalcemia caused from hyper-responsiveness or overdosage may become so severe as to require emergency treatment, Dr. McKenzie warns.

A new directory, listing health care equipment and supplies (including dental items) made in Canada, could be quite a disappointment to dental establishments.

"Made in Canada Health Care Products," published by the Government of Canada, Industry Trade and Commerce, Ottawa, December, 1981, concerns itself with Canadian-made products, but because there are very few dental supply manufacturers in this country, the list of dental items is very brief, and not all-inclusive.

Supplies such as dental cements, X-ray film, dental floss, dental sutures and dental units are all listed under the same category heading in the directory: "Dental." However, because of the sparsity of Canadian dental manufacturers, this manual is not very useful and would have limited use to dental establishments.

The directory, which lists about 300 companies and about 1,500 products is of more use to medical and hospital establishments since many more medical devices are manufactured in Canada.

An attendance of about 600 dentists and 80 exhibitors is anticipated at the Greater Niagara Frontier Dental Meeting, which will be held at the

Buffalo Convention Center, September 23-25, 1982.

The featured event at the gathering, sponsored by the Dental Alumni Association of the State University of New York at Buffalo, is the 12th Annual James A. English Symposium on Sept. 23. The subjects will be: "Management of Periodontal Disease: Studies of Modes of Therapy and Their Application to Various Periodontal Disease Conditions," and "Innovators in Health Care Delivery," on Sept. 24.

Dalhousie University's dental school is the most modern dental education facility in Canada. But little research assistance from public and private sources comes its way.

The school, in fact, ranks fifth or sixth among the 10 Canadian dental faculties on any grants list, the Halifax Mail Star reports, quoting Dalhousie's Dr. Derek Jones, head of the dental faculty's division of dental biomaterials and member of the Medical Research Council's review committee for dental grant applications.

Dental faculties must compete against each other and against medical schools for research dollars.

Medical schools have more research money and offer a wider variety of fields in which to work. The Medical Research Council, the federal government's principal granting agency for medical and dental research, allots only 1.5 cents of every dollar for dental research. The rest goes to the medical schools, Dr. Jones says.

Dr. Gregory White of Regina is the 1982 president of the College of Dental Surgeons of Saskatchewan.

A graduate of the University of Alberta, Dr. White has practised in Regina since 1962.

Also elected to the College are Dr. B.E. White as vice-president, and Drs. W.M. McKechnie, W.P. Reed, G.A. Riekman, J.K. Sutherland and E.W. Zak as council members.

Dr. George E. Decker recently retired as Editor of the ADA News Information, the official publication

of the Alberta Dental Association. He also held the position of Executive Director of the ADA for many years.

He was presented with a plaque of appreciation by Dr. P.J. Kirby, President of the ADA.

Health and Welfare Canada's deadline for applications for research proposals and career awards has been set for July 31, 1982 for possible funding on or after April 1, 1983.

Most renewal applications must also be submitted by the July 31 deadline.

Under the National Health Research and Development Program, Health and Welfare Canada has been able to assist investigators in a variety of research projects aimed at advancing national health goals. In the area of dental medicine, Murray Hunt, University of Toronto, received a \$224,434.61 grant in 1979 to study dental manpower systems in relation to oral health status in Ontario. Claire Infante-Rivard of Montreal received \$68,440.29 to study the prevalence and incidence of caries, malocclusion and periodontal disease in school-age children in the Montreal region.

The scientific program planned for the 13th International Cancer Congress, September 8 — 15, 1982, in Seattle, Washington, provides major opportunities for informative discussion and updating in the various fields of oncology, including dentistry.

Delegates from 95 nations, experts in every aspect of the prevention, control and treatment of cancer, will attend the congress, which will be held under the auspices of the International Union Against Cancer (UICC). About 12,000 people involved in cancer research and diagnosis, the continuing care and rehabilitation of cancer patients and families, and the development of informative materials about cancer, are expected to attend.

Of special interest to dental oncologists are programs devoted to the increasing role of dentistry as an oncological specialty, dealing with the management of neoplasias of the oral

cavity and a review of selective topics.

Continuing education courses to be conducted include one on Head and Neck Cancer, with discussion of the dental aspects, oral cavity, larynx, chemotherapy and radiation therapy.

Full program details and registration information are available from the Congress office, Suite 1800, Fourth and Blanchard Building, Seattle, WA 98121, U.S.A. or telephone (206) 621-9440. Note that housing accommodation cannot be guaranteed after July 31, 1982.

The 70th Annual World Dental Congress of the FDI will be held in Vienna October 10-16.

The scientific program and FDI business sessions will take place in the state rooms of the Vienna Hofburg. Planned jointly by FDI's organizing and scientific program committees, the program will focus on geriatric dentistry, comparison of non-surgical and surgical measures in the treatment of advanced periodontal disease and alternatives to noble metal based alloys in dentistry because the General Assembly of the United Nations has designated 1982 as The International Year of the Aging Person.

In conjunction with the Congress, the International Dental Exhibition will be also held in Vienna.

Application forms and the preliminary program can be obtained from the Executive Director of the FDI, 64 Wimpole Street, London W1M 8AL United Kingdom or from the FDI Congress Secretariat 1982, Interconvention, Post Box 80 A-1107, Vienna.

Dentists in South Africa had the job of tackling a major cavity recently.

Homly the elephant, a long-time resident at the Bloemfontein Zoo, was suffering from a cavity the size of a man's fist in one immense molar. Using enough anaesthetic to kill 70 men, 17 dentists, doctors, veterinarians and technicians set about to rid her of her toothache.

Dentists had to pack the cavity with \$200 worth of amalgam. The procedure took 90 minutes.

CDA Resource Centre/Le Centre de documentation

GERIATRIC DENTISTRY

Copies of the following articles are available at no charge from the library. Original abstracts which were included with the references are provided below. Part of this bibliography was generated with the help of MEDLARS, a computerized information retrieval system for the health sciences field, which has been operational at the library since February, 1982, and is at the disposal of all members.

Current Listings/ en bibliothèque

1. Axelband, Alan A. **Reaching the senior citizen.** New York State Dental Journal, v.47, no.4, April 1981, pp.187-188.

Abstract: "It would be indiscreet to assume that an audience of senior citizens is made up of denture-wearers. It is estimated that approximately 51 percent of the elderly population are edentulous."

2. Banting, David and Oudshoorn, Wilhelm. **The clinical management of the aging patient: treatment concepts and procedures.** Ontario Dentist, v.56, no.4, April 1979, pp.19-24.

3. Berger, Ruth. **Nutritional needs of the aged.** California Dental Association Journal, v.7, no.11, November 1979, pp.45-51.

4. Berquist, Herbert C. **Dental care for the institutionalized elderly: is it really all it could be?** California Dental Association Journal, v.7, no.11, November 1979, pp.33-55.

5. Butz-Jorgensen, E., Stenderup, A. and Grabowski, M. **An epidemiologic study of yeasts in elderly denture wearers.** Community Dentistry and Oral Epidemiology, v.3, May 1975, pp.115-119.

DENTISTERIE POUR LES GENS ÂGÉS

On peut obtenir gratuitement de la bibliothèque de l'ADC des copies des articles énumérés ci-dessous. Le cas échéant, on a reproduit les sommaires originaux accompagnant les titres. Une partie de cette bibliographie a été préparée à l'aide du système informatisé MEDLARS. En service à la bibliothèque depuis février 1982, ce système permet d'obtenir des renseignements touchant les sciences de la santé et est à la disposition de tous les membres.

Abstract: "The purpose of this study has been to assess the prevalence of denture stomatitis and candida infection in an elderly Danish population. Ten percent of the population above the age of 65 in a Danish community was selected randomly. The study group consisted of 465 persons wearing a removable maxillary denture, who were examined in their homes... The study has revealed that candida infection and poor denture cleanliness are very common in elderly denture wearers."

6. Busse, Geraldine and Simpson, Roger. **Dentistry and nursing work together to improve care of the aged.** Journal of Gerontological Nursing, v.6, no.5, May 1980, pp.280-283.

7. Colchamiro, Esther Kaplan. **Dental care resources for older persons.** Journal of Hospital Dental Practice, v.13, no.4, 1979, pp.141-146.

8. Fishman, Norton and Gordon, Nancy. **Don't they all wear dentures?** Journal of the Massachusetts Dental Society, v.25, no.1, Winter 1976, pp.32-33..

9. Fishman, Norton. **A pragmatic approach to care of the elderly dental patient.** Journal of the Massachusetts Dental Society, v.30, no.1, Winter 1981, pp.3-8.

10. Grabowski, Mikael and Bertram, Ulrik. **Oral health status and need of dental treatment in the elderly Danish population.** Community Dentistry and Oral Epidemiology, v.3, May 1975, pp.108-114.

Abstract: "Oral health and dental treatment needs were investigated in 560 elderly persons in the county of Vestsjaelland (West Zealand) in Denmark... The final sample population was representative of the total Danish population in relation to sex and socioeconomic status for this specific age group. Oral health was generally poor. In all, 68.2% of the population were edentulous (64.7% of the males, 70.7% of the females), while the dentate persons had an average of 12 teeth; 3.6% were totally edentulous and lacked dentures in both jaws, a further 5.5% were totally edentulous and lacked a denture in one jaw, and 83.4% had removable dentures. Only 3.4% of the dentate and 28.2% of the edentulous persons did not need any dental treatment. The total percentage of people needing treatment was 80. Prosthetic treatment was the main requirement, applying to 80% of the group..."

11. Kamen, Saul. **Skills training in geriatric dentistry.** New York State Dental Journal, v.47, no.4, April 1981, pp.202-205.

Abstract: "The special oral problems of the aged require a distinct

- body of knowledge and skills geared to the biological, physiological, pathological, and psychological effects of aging on the oral apparatus. In this respect, it is clear that dental schools have provided inadequate training in gerodentics, both to predoctoral and postdoctoral students."
2. Kesner, Arthur. **Geriatric dentistry in the nursing home — the patient/dentist relationship.** New York State Dental Journal, v.47, no.4, April 1981, p.199.
 3. Ketron, Ruth. **Dental aspects of the aging.** Journal of the Tennessee Dental Association, v.60, no.1, January 1980, pp.17-20.
 4. Koerber, Leonard G. **The dental consultant and long term care facilities.** Journal of the Massachusetts Dental Society, v.30, no.1, Winter 1981, pp.23-26.
 5. Kowitz, Michael D. et al. **Prosthetic maintenance research program for the geriatric patient: a cooperative study by the dental profession and the Dental Laboratory Conference.** California Dental Association Journal, v.7, no. 11, November 1979, pp.37-44.
 16. Langer, Anselm, Michman, Julius and Librach, Gershon. **Tooth survival in a multicultural group of aged in Israel.** Community Dentistry and Oral Epidemiology, v.3, May 1975, pp.93-99.
Abstract: "Survival of natural dentition was studied in a multicultural group of 826 elderly people living in sheltered conditions in three old-age homes. It was found that the ratio of dentate subjects decreased progressively with age. The proportion of dentate men was significantly higher than that of women. The ratio of dentate subjects among the immigrants from Afro-Asian countries was significantly higher than among the European group. As the number of denture wearers among the elderly of European origin greatly exceeded that of Afro-Asian extraction, the assumption was made that the more advanced cultural background of the Europeans motivated them to take more advantage of dental services and as a result they had more teeth extracted due to pre-prosthetic preparations. The mandibular teeth showed a higher survival rate than the maxillary. Most remaining dental units (teeth and roots) were found in the front region in both jaws, with definite persistence of canines and a clear tendency towards diminishing numbers of posterior tooth types. Studies on tooth survival may provide useful information for assessing needs and planning services for the aged in modern society and may contribute to better understanding of prosthetic problems encountered in practice."
 17. Manderson, R.D. and Ettinger, R.L. **Dental status of the institutionalized elderly population of Edinburgh.** Community Dentistry and Oral Epidemiology, v.3, May 1975, pp.100-107.
 18. Massler, Maury. **Geriatric dentistry.** Pennsylvania Dental Journal, v.48, no.3, May/June 1981, pp.5-6.
 19. Massler, Maury. **Geriatric dentistry: the problem.** Journal of Prosthetic Dentistry, v.40, no.3, September 1978, pp.324-325.
 20. Massler, Maury. **Geriatric nutrition: the role of taste and smell in appetite.** Journal of Prosthetic Dentistry, v.43, no.3, March 1980, pp.247-250.
 21. Massler, Maury. **Geriatric patient care.** New York Journal of Dentistry, v.52, no.1, December 1981 — January 1982, pp.7-9.
 22. Rafal, Sidney. **Geriatric dentistry: the problem.** Journal of the Massachusetts Dental Society, v.30, no.1, Winter 1981, pp.10-17.
 23. Ranking, M.P. **Geriatric dentistry — a new look at an old problem.** Ontario Dentist, v.54, no.8, August 1977, pp.13-14.
Abstract: "The dental profession has, for many years, endorsed a programme of total dental care but it recognized that this would never be possible without an effective prevention programme starting with pre-school children."
 24. Rise, Jostein. **Validation of data on demand and need for dental treatment in an elderly population.** Community Dentistry and Oral Epidemiology, v.7, February 1979, pp.1-5.
Abstract: "The present paper intended (1) to validate some key variables employed in a survey of a representative sample of 241 persons aged 65-79 in Troms in Northern Norway, and (2) to discuss aspects of social policy related to dental programs for pensioners. The participants were asked questions focused on potential demand for dental services, and oral problems. Treatment need was assessed professionally... Validity was studied in terms of sensitivity and specificity. Using referral as a criterion, the question related to potential demand displayed a sensitivity of only 53%, probably because of the imprecise wording, while the specificity appeared to be 82%. Ninety-five persons reported oral problems. The existing subsidy arrangements operating in a traditional service setting did not seem to cope ade-

quately with this problem group. Treatment need was a sensitive (88%), but not a specific (43%) indicator of oral problems. Viewed socio-politically, these findings may be interpreted as a need for visiting services and for an upgrading of the value of self-assessment. It was concluded that this method of validation provided additional information on the practical usefulness of the test methods employed."

25. Thomas, Annette M. and Ship, Irwin I. **Current status of geriatric education in American dental schools.** Journal of Dental Education, v.45, no.9, September 1981, pp.589-591.

A current government publication presently available from the library/resource centre is "Made in Canada Health Care Products".

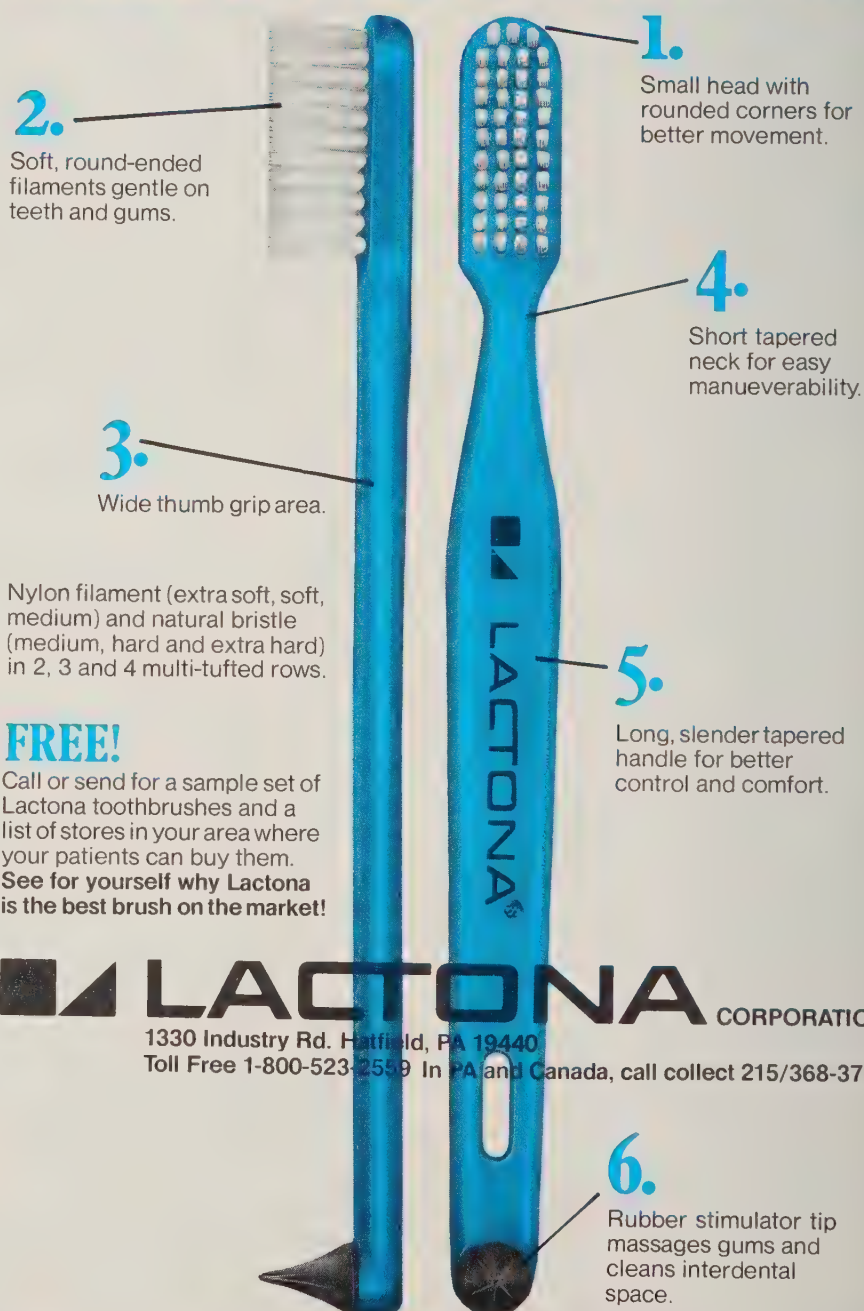
Published by the Government of Canada, Industry, Trade and Commerce in December, 1981, the 207-page document was recently reviewed by Dr Ralph Barolet, Chairman, CDA's Council on Dental Materials and Devices.

Review: "The Government of Canada has just published a directory which lists health care equipment and supplies which are made in Canada. The manual contains information on about 300 companies and 1500 products. The products and their manufacturers are listed in four sections. These are medical devices, in-vitro diagnostics, general hospital equipment and general hospital supplies. A fifth section lists manufacturers and their products. The manual uses a simplified cross-reference system so that easy reference is possible. A list of key words is also provided to assist in finding the required listing. As the title states, this manual concerns itself with Canadian made products. As

there are very few dental manufacturers in Canada, the list of dental items is quite brief and not at all inclusive. Such differing items as dental cements, dental x-ray film, dental floss, dental sutures and dental units are all listed under the same heading "Dental". Because of the sparsity of

Canadian dental manufacturers, this manual is not useful or would have very limited use to dental establishments. It is of more use to medical and hospital establishments since many more medical devices are of Canadian manufacture as compared to dental devices."

Anatomy of a great toothbrush.



Manufacturers of Lactona toothbrushes, dental accessories, Universal porcelain and plastic teeth.

Highlights — interim Board of Governors meeting



Executive Director Hubert Drouin has prepared the following report of highlights of a meeting of the CDA Board of Governors in Ottawa, March 19-20.

Most prominent among the items of business transacted was the adoption of two policy statements on the subjects of dental services and dental hygiene.

PAYMENT FOR DENTAL SERVICES

The Canadian Dental Association recognizes the value of services provided by members and commends payment based on the individual services provided as being the one method that is equitable for all parties involved.

Payment of fees for individual services rendered allows dental patients to select a dental practitioner of their choice and requires the patient to participate in the selection of a treatment plan appropriate to their needs and circumstances.

As alternate systems of compensation for dental services such as closed panel capitation systems, deny one or more legitimate freedoms to either the patient or the dentist, the CDA therefore declares its opposition to such access or payment mechanisms.

The CDA accepts a commitment to make its views known to dental care plan administrators, plan purchasers, and the public generally, along with the reasons for this position in effort to ensure that residents of Canada have continued access to the best possible method of obtaining quality dental care.

DENTAL HYGIENE

Dental hygienists were developed by the dental profession to provide delegated dental hygiene services to patients while under the supervision of a dentist. Dental hygiene services are an important part of the total oral health care of the patient. Such services are an integral part of the overall patient treatment plan which is developed by the dentist and therefore must be completed under adequate dental supervision within the context of the overall dental needs of the patient. The dentist maintains legal responsibility for the total dental care of the patient and is professionally responsible for services provided by the dental hygienist.

The systems of education and licensure of dental hygienists are based on the auxiliary status of the dental hygienist. Dental hygienists are educated to perform dental hygiene functions under the supervision of a dentist. The educational and the provincial licensing systems historically have maintained this relationship between dentists and dental hygienists. The current accreditation standards continue to reinforce that responsibility. The dental hygiene curriculum prepares the graduate to perform delegated functions competently as a licensed dental hygienist.

The dental profession is committed to the importance of a comprehensive oral health care program for patients. Diagnosis, preventive services, restorative care and health maintenance

are viewed as inseparable components of an integrated dental care program.

During the past several decades, dentists and dental hygienists working together have greatly enhanced the therapeutic and preventive dental services available to the Canadian public. The combined efforts of the dental profession, provincial licensing boards and dental hygiene are essential to increase the access to and provision of dental care and the maintenance of high standards of practice and education.

FINANCIAL STATEMENTS

The Financial Statements were presented for the fiscal year ending December 31, 1981, and were adopted. The Association enjoyed a surplus of \$461,953. for 1981. This amount places the Association in a good financial position and negates the large deficit experienced two years ago. The financial statement is shown in detail elsewhere in this issue of the Journal.

LIFE MEMBERSHIP

This category of membership is available to all those CDA members who have practised for forty years and/or have reached age 65. Members who qualify are encouraged to apply to the Executive Council for consideration. Applications received in any given year will be effective the following year.

CDSPI

The Board approved a number of changes to the CDSPI. These modifications will once more enhance the insurance plans available to members. You are encouraged to study the information provided in the announcements. These are:

(i) Long Term Disability Coverage to Age 70

CDSPI/LTD. coverage is extended to age 70 based on the following:

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- coverage can be continued (renewed) on a yearly basis to age 69 on a 31-day elimination basis.
- Maximum of coverage is the maximum for LTD at that time (currently \$4,000).
- The benefit period is a two year maximum
- The coverage is applicable to total disability only.
- The premium to be negotiated with the carrier, not to exceed \$45/\$100 of coverage.

(ii) Instant Cash for Widows (ers)

Immediate financial assistance to beneficiaries at the time of death of a Life policyholder, and upon notification of death, is now available and is retroactive to January 1, 1982.

(iii) Goodwill Cash Settlement/ Malpractice Insurance

The "Assumption of liability clause" is amended as follows:

"The insured shall not accept at his own cost or *voluntarily* make any payment, assume any obligation or incur any expenses other than for first aid to others at the time of accident. *However*, activities carried out under the auspices of any official grievance committee are permitted without prejudice to this insurance."

COUNCIL ON CONSTITUTION & BY-LAWS

The Board considered and approved changes to its by-laws relative to the structure of its Councils on Health Care and Education, which now limit membership to members of the CDA. The Association has, however, informed the auxiliary groups that participation by both the Canadian Dental Hygienists' Association and the Canadian Dental Nurses' and Assistants' Association is desirable and will continue. Both organizations have been assured of CDA's wish to continue to maintain the good relationship which has existed for so many years.

COUNCIL ON DENTAL MATERIALS & DEVICES

The Council on Dental Materials &

Devices has been discussing with the Canadian Standards Association, the possibility of a certification program for dental products. The Board has endorsed these discussions and this program will be developed over the months ahead.

COUNCIL ON HOSPITAL SERVICES

The following accreditation classifications were approved:

(i) Provisional Approval

On the basis of a site visit and an institutionally prepared prospectus this classification is granted to an Institution/Program where it has been found that the Institution/Program has a number of major deficiencies or weaknesses in one or more basic areas. The deficiencies or weaknesses are considered to be of such magnitude that, if not corrected, withdrawal of the Institution/Program's accreditation status will result. Evidence of significant progress must be demonstrated within one year.

(ii) Conditional Approval

On the basis of a site visit and an institutionally prepared prospectus this classification is granted to an Institution/Program where specific deficiencies or weaknesses exist in one or more specific areas of the program. The deficiencies or weaknesses are considered to be of such a nature that they can be corrected in one year. An Institution/Program receiving the status of CONDITIONAL APPROVAL must provide a progress report at the end of the year.

(iii) Full Approval

On the basis of a site visit and an institutionally prepared prospectus this classification when granted to an

Institution/Program indicates that the Institution/Program achieves or exceeds the minimum requirements for APPROVAL as established by the Council on Hospital Services. The accreditation classification specifies that the Program has no serious deficiencies or weaknesses. However, recommendations or suggestions relating to program enhancement are generally included in the evaluation report. This approval is for three (3) years.

The Board accepted reports from a number of Committees such as the Taxation Committee which has been actively engaged in several representations to the federal government over the past several months. A joint committee has now been formed with the Canadian Bar Association, the Canadian Medical Association and the Canadian Institute of Chartered Accountants to review methods for improvement in Pre-Tax Retirement Savings Opportunities.

Many organizations such as the National Dental Examining Board, the Association of Canadian Faculties of Dentistry, the Royal College of Dentists of Canada and the Canadian Fund for Dental Education attended the Board Meeting and participated actively in the deliberations of the 24 governors who represent the members of the Association. We are therefore pleased to once again list each governor so that you may know who represents you should you wish to make your views known regarding the affairs of the Association.

Hubert Drouin,
Executive Director
Secretary, Board of Governors

1981-1982 Board of Governors Bureau des gouverneurs — 1981-1982

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Health & Welfare Canada
Santé et Bien-être Canada
Dr. J.C. Isataroff
Department of Veterans Affairs
Ministère des Anciens combattants

In the News

Financial Statement

We have prepared the balance sheet of the Canadian Dental Association as at December 31, 1981 and the statements of revenue and expenses and surplus, revenue and expenses and surplus for the Library Trust Fund and the Grieve Memorial Lectureship Fund and changes in financial position for the year then ended. Our examination was made in accordance

with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the Association as at December 31, 1981 and the results of its operations and the changes in its

financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

McCay Duff & Company
Chartered Accountants

Ottawa, Ontario,
January 21, 1982

BALANCE SHEET AS AT DECEMBER 31, 1981

ASSETS		
Current	1981	1980
Cash	\$ 545,764	\$ 91,937
Deposit certificates	200,000	150,000
Accounts receivable	66,591	101,795
Inventory (note 1)	45,169	31,973
Prepaid expenses	25,025	17,173
	882,549	392,878
Fixed (notes 1 and 2)	1,332,289	1,375,359
	2,214,838	1,768,237

TRUST ASSETS		
Cash	58,380	53,507
Bonds and deposit certificate	5,343	5,343
Due from Canadian Dental Association	—	847
Library books and furniture (at nominal value)	1	3,339
	63,724	63,036
	\$2,278,562	\$1,831,273

LIABILITIES		
Current		
Accounts payable	\$ 50,420	\$ 73,255
Deferred revenue	588,409	574,444
Due to Trust Fund	—	847
Current portion of long term debt	6,000	6,000
	644,829	654,546
Long Term Debt (note 3)	448,094	453,729

SURPLUS		
Surplus	1,121,915	659,962
	2,214,838	1,768,237

TRUST LIABILITIES		
Accounts payable	500	300
Library Trust Fund	57,455	56,666
The Grieve Memorial Lectureship Fund	5,769	6,070
	63,724	63,036
	\$2,278,562	\$1,831,273

STATEMENT OF REVENUE AND EXPENSES AND SURPLUS FOR THE YEAR ENDED DECEMBER 31, 1981

	1981		1980
	Budget	Actual	Actual
Revenue			
Fees (schedule A)	\$1,766,419	\$1,781,072	\$1,237,806
Grants	36,500	45,185	44,326
Journal (schedule C)	337,700	315,312	285,120
Publications	30,000	42,331	40,594
Interest	25,000	104,902	19,754
Rental	106,961	112,383	107,021
Other (schedule B)	18,000	61,288	28,403
	2,320,580	2,462,473	1,763,024
Expenses			
Honoraria and per diem	143,250	168,998	155,145
Salaries and benefits	448,350	458,949	408,764
General and administration (schedule D)	283,700	296,614	245,569
Conferences	29,000	48,178	30,946
Journal (schedule C)	396,550	376,993	334,594
Other publications (schedule E)	57,000	51,813	42,489
Institutional advertising	15,000	—	—
Travel and meetings (schedule F)	227,600	290,782	231,294
Property/management	215,000	225,697	194,717
Dental Health Month	30,000	29,028	24,510
Accreditation surveys	25,700	15,009	24,275
Dental Aptitude Program	34,400	38,459	25,487
	1,905,550	2,000,520	1,717,790
Excess of revenue over expenses for the year	415,030	461,953	45,234
Surplus — beginning of year	659,962	659,962	614,728
Surplus — end of year	\$1,074,992	\$1,121,915	\$ 659,962

STATEMENT OF CHANGES IN FINANCIAL POSITION FOR THE YEAR ENDED DECEMBER 31, 1981

	1981	1980
Source of Funds		
Operations		
Excess of revenue over expenses for the year	\$461,953	\$ 45,234
Item not requiring working capital — depreciation	57,296	44,688
	<u>519,249</u>	<u>89,922</u>
Application of Funds		
Purchase of fixed assets	14,226	35,627
Reduction of long term debt	5,635	5,626
	<u>19,861</u>	<u>41,253</u>
Increase in working capital	499,388	48,669
Working capital (deficiency) — beginning of year	(261,668)	(310,337)
Working capital (deficiency) — end of year	<u>\$237,720</u>	<u>(\$261,668)</u>

LIBRARY TRUST FUND

STATEMENT OF REVENUE AND EXPENSES AND SURPLUS FOR THE YEAR ENDED DECEMBER 31, 1981

	1981	1980
Revenue		
Interest	\$ 9,648	\$ 4,760
Expenses		
Binding	67	164
Write down of books and furniture	4,965	774
Subscriptions	524	692
Supplies and services	3,303	—
	<u>8,859</u>	<u>1,630</u>
Excess of revenue over expenses for the year	789	3,130
Surplus — beginning of year	56,666	53,536
Surplus — End of year	<u>\$57,455</u>	<u>\$56,666</u>

NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 1981

1. Significant Accounting Policies

- Inventory**
Inventory is stated at the lower of cost and net realizable value.
- Depreciation**
Furniture and equipment purchased subsequent to January 1, 1979 are expensed when acquired. Depreciation is provided on the straight line basis as follows:
Building — 40 years
Building improvements — 5 years
Furniture and equipment — 10 years
- Revenue Recognition**
Membership fees and subscriptions to the Journal are recognized as revenue in the year to which they apply. Grants are recognized as revenue when received.

2. Fixed Assets

	1981			1980
	Cost	Accum. Deprec'n	Net	Net
Land	\$ 82,915	\$ —	\$ 82,915	\$ 82,915
Building	1,376,435	203,134	1,173,301	1,207,712
Building improvements	63,358	20,710	42,648	43,730
Furniture and equipment	88,309	54,884	33,425	41,002
	<u>\$1,611,017</u>	<u>\$278,728</u>	<u>\$1,332,289</u>	<u>\$1,375,359</u>

3. Long Term Debt

	1981	1980
Mortgage	\$454,094	\$459,729
Current portion	6,000	6,000
	<u>\$448,094</u>	<u>\$453,729</u>

The mortgage is renewable annually and currently bears interest at 15.25% per annum.

THE GRIEVE MEMORIAL LECTURESHIP FUND

STATEMENT OF REVENUE AND EXPENSE AND SURPLUS FOR THE YEAR ENDED DECEMBER 31, 1981

	1981	1980
Revenue		
Interest	\$ 399	\$ 305
Expense		
Grant to the Orthodontic section of the Canadian Dental Association	700	300
Excess of revenue over expense (Expense over revenue) for the year	(301)	5
Surplus — beginning of year	6,070	6,065
Surplus end of year	<u>\$5,769</u>	<u>\$6,070</u>

**APPROVED BY THE CDA BOARD OF GOVERNORS
MARCH 1982**

Réunion provisoire des gouverneurs — Faits saillants

Le rapport qui suit a été préparé par M. Hubert Drouin, directeur général, et donne les faits saillants de la réunion provisoire du Bureau des gouverneurs qui a eu lieu les 19 et 20 mars à Ottawa.

Les points les plus importants de la réunion ont porté sur l'adoption de deux énoncés de principe sur les services et l'hygiène dentaires.

LA RÉMUNÉRATION DES SERVICES DENTAIRES

L'Association dentaire canadienne reconnaît la valeur des services rendus par ses membres et préconise le mode de rémunération à l'acte comme étant le seul qui soit équitable pour toutes les parties intéressées.

La rémunération à l'acte permet au patient de choisir son dentiste et exige du patient qu'il participe au choix du traitement qui convient, selon les circonstances, à ses besoins.

Comme les autres modes de rémunération des services dentaires, tels les circuits fermés et la rémunération par tête, ou capitation, privent le patient ou le dentiste de certaines libertés auxquels ils ont droit, l'ADC s'oppose à ces modes d'accès aux services et de rémunération.

L'ADC s'engage à faire connaître son point de vue et ses motifs aux administrateurs des régimes de soins dentaires, aux acheteurs de ces régimes et à la population en général, de façon à ce que les résidents du Canada aient toujours accès aux meilleurs moyens possibles d'obtenir des soins dentaires de qualité.

L'HYGIÈNE DENTAIRE

L'hygiéniste dentaire a été créé par la profession de la médecine dentaire pour rendre des services d'hygiène au patient, par voie de délégation et sous la surveillance du dentiste. Les services d'hygiène dentaire occupent une part importante dans l'ensemble des

soins buccaux offerts au patient et font partie du plan de traitement que le dentiste met au point à son intention. Ils doivent donc être dispensés sous surveillance appropriée du dentiste et compte tenu de l'ensemble des besoins du patient en soins dentaires. Le dentiste est juridiquement responsable de tous les soins dentaires dispensés au patient et répond professionnellement des services rendus par l'hygiéniste dentaire.

Les régimes d'enseignement et d'autorisation partent du principe que l'hygiéniste dentaire a un statut d'auxiliaire. Sa formation l'oriente vers l'exercice de certaines fonctions d'hygiène dentaire sous la surveillance du dentiste et cette relation a toujours été maintenue tant dans l'enseignement que dans les régimes d'autorisation appliqués par les provinces. Les normes actuelles d'agrément renforcent cette responsabilité et les programmes de formation en hygiène dentaire préparent le candidat à assumer avec compétence des fonctions qui lui sont déléguées à titre d'hygiéniste dentaire autorisé.

La profession de la médecine dentaire a l'obligation d'offrir au patient un programme global de santé buccale et en reconnaît l'importance. Le diagnostic, les services de prévention, les soins de restauration et d'entretien de la santé sont autant d'éléments d'un programme intégré de soins dentaires qu'on ne peut pas fragmenter.

En travaillant ensemble, les dentistes et les hygiénistes dentaires ont, depuis plusieurs décennies, amélioré grandement les services de thérapie et de prévention dentaires offerts à la population canadienne. Il est essentiel que la profession de la médecine dentaire, les organismes provinciaux de réglementation et le corps des hygiénistes dentaires joignent leurs efforts pour accroître les services dentaires et en étendre l'accès, ainsi que pour

maintenir l'excellence de la pratique et de la formation dans le domaine.

RAPPORTS FINANCIERS

Les rapports de l'exercice financier se terminant le 31 décembre 1981 ont été adoptés. L'Association a enregistré un excédent de 461 953 \$, qui comble le déficit encouru il y a deux ans et la place en bonne situation financière. L'état financier paraît dans d'autres colonnes du présent numéro.

LES MEMBRES À VIE

Tout membre de l'ADC qui exerce la profession depuis 40 ans ou a atteint l'âge de 65 ans peut devenir membre à vie de l'Association. Ceux qui sont admissibles à cette catégorie de membres sont encouragés à poser leur candidature auprès du Conseil exécutif. Les demandes reçues au cours de l'année prendront effet l'année suivante.

LE CDSPI

Le Bureau des gouverneurs a apporté certaines modifications au CDSPI, afin d'améliorer encore les régimes d'assurance offerts aux membres. Chacun est prié de bien les examiner. Les voici.

i) Incapacité à long terme portée à l'âge de 70 ans

CDSPI Ltée étend sa couverture jusqu'à l'âge de 70 ans selon les modalités suivantes:

- a) la couverture peut être maintenue (renouvelée) annuellement jusqu'à l'âge de 69 ans sur une base d'élimination de 31 jours;
- b) la couverture maximale est celle fixée pour incapacité à long terme à ce moment-là (actuellement, elle est de 4 000 \$);
- c) l'avantage vaut pour une période maximale de deux ans;
- d) la couverture s'applique à l'incapacité totale seulement;

e) la prime est de 38,96 \$/100 de couverture (40,04 \$/100 avec COLA).

ii) Versement comptant à la mort

Les bénéficiaires peuvent maintenant recevoir, sur avis de décès, une aide financière immédiate au décès d'un détenteur d'une police d'assurance-vie. La somme versée représente 10 p. 100 du montant de la police, jusqu'à un maximum de 5 000 \$.

iii) Règlement comptant de bonne foi/ Assurance faute professionnelle

La clause portant sur la "présomption de responsabilité" est ainsi modifiée:

"L'assuré ne prendra à ses frais ni ne versera *volontairement* de paiement, n'assumera aucune obligation ni n'encourra aucune dépense autre que pour les premiers soins aux autres au moment de l'accident. *Toutefois*, les activités menées sous les auspices de tout comité de grief officiel sont permises sans préjudice à la présente assurance."

iv) Autres modifications

L 1^{er} janvier, il y a eu une hausse de 10 p. 100 de la couverture des polices d'assurance-vie et une baisse de 10 p. 100 de la prime; le 1^{er} juillet 1982, il y aura une hausse de 10 p. 100 de l'assurance du matériel de bureau.

LE CONSEIL DES STATUTS ET RÈGLEMENTS

Les gouverneurs ont apporté des modifications aux règlements concernant l'organisation du conseil des services de santé et du conseil de l'éducation, dont les membres doivent maintenant faire partie de l'ADC. L'Association a cependant informé les groupes auxiliaires que la participation de l'Association canadienne des hygiénistes dentaires et de l'Association des infirmiers et infirmières dentaires est non seulement souhaitable

mais aussi continuera. L'ADC a assuré les deux organismes de son intention de maintenir les bonnes relations qui existent depuis tant d'années.

LE CONSEIL DES MATÉRIAUX ET APPAREILS DENTAIRES

Le Conseil des matériaux et appareils dentaires a discuté, avec l'Association canadienne de normalisation, la possibilité de mettre sur pied un programme de certification des produits dentaires. Les gouverneurs ont approuvé ces discussions et le programme sera élaboré au cours des prochains mois.

LE CONSEIL DES SERVICES HOSPITALIERS

Les catégories d'agrément suivantes ont été approuvées.

i) Approbation provisoire

Sur la foi d'une visite des lieux et du prospectus préparé par l'institution, l'approbation provisoire est accordée à l'institution dont le programme d'enseignement présente des faiblesse ou des déficiences importantes dans au moins une matière de base. On considère que les déficiences ou les faiblesses sont telles que l'Institution, ou du moins le programme, perdra l'agrément si on n'y apporte pas les corrections souhaitées. L'institution doit démontrer qu'elle a fait des progrès substantiels au cours de l'année.

ii) Approbation conditionnelle

Sur la foi d'une visite des lieux et du prospectus préparé par l'institution, l'approbation conditionnelle est accordée à l'institution dont le programme d'enseignement présente des faiblesses ou des déficiences particulières dans au moins une des matières. On considère que les déficiences ou les faiblesses peuvent être corrigées en une année. L'institution, ou le programme qui reçoit l'agrément condi-

tionnel doit présenter un rapport à la fin de l'année.

iii) Approbation entière

Sur la foi d'une visite des lieux et du prospectus préparé par l'institution, l'approbation entière est accordée à l'institution dont le programme satisfait aux exigences minimales du Conseil des services hospitaliers, ou les dépasse. L'agrément de cette catégorie dit expressément que le programme n'a aucune déficience ni faiblesse sérieuse, mais le rapport d'appréciation contient ordinairement des recommandations ou suggestions pour améliorer le programme. Cette approbation est valable pour trois (3) ans.

Le Bureau des gouverneurs a accepté les rapports d'un certain nombre de comités, entre autres, le comité des questions fiscales qui a entrepris, depuis plusieurs mois, un grand nombre de démarches auprès du gouvernement fédéral. Un comité conjoint a été créé avec le Barreau canadien, l'Association médicale du Canada et l'Institut canadien des comptables agréés pour mettre au point de nouveaux moyens d'améliorer les régimes d'épargne-retraite avant impôt.

Plusieurs organismes, tels le conseil national d'examen des dentistes, l'Association des facultés canadiennes de médecine dentaire, le Collège royal des dentistes du Canada et le Fonds canadien pour l'enseignement dentaire, ont assisté à la réunion du Bureau et participé activement aux délibérations des 24 gouverneurs qui représentent les membres de l'Association. Il nous fait donc plaisir de vous présenter, une fois de plus, la liste de toutes ces personnes, de façon à ce que vous sachiez qui vous représente au cas où vous aimeriez faire connaître vos vues sur les affaires de l'Association.

Hubert Drouin,

Directeur général,

Secrétaire du Bureau des gouverneurs

Les Actualités

Le rapport financier

Nous avons vérifié le bilan de l'Association Dentaire Canadienne au 31 décembre 1981 ainsi que l'état des résultats et du surplus, les états des résultats et du surplus des fonds en fiducie pour la bibliothèque et du fonds "Grieve Memorial Lectureship" et l'état de l'évolution de la situation financière de l'exercice terminé à cette date. Notre vérification a été effectuée

conformément aux normes de vérification généralement reconnues, et a comporté par conséquent les sondages et autres procédés que nous avons jugés nécessaires dans les circonstances.

À notre avis, ces états financiers présentent fidèlement la situation financière de l'Association au 31 décembre 1981 ainsi que les résultats de son exploitation et l'évolution de sa

situation financière pour l'exercice terminé à cette date selon les principes comptables généralement reconnus, appliqués de la même manière qu'au cours de l'exercice précédent.

Ottawa, Ontario,
le 21 janvier, 1982

BILAN AU 31 DÉCEMBRE 1981

ACTIFS

Actif à court terme	1981	1980
Encaisse	\$ 545,764	\$ 91,937
Certificats de dépôt	200,000	150,000
Comptes à recevoir	66,591	101,795
Inventaire (note 1)	45,169	31,973
Frais payés d'avance	25,025	17,173
	<u>882,549</u>	<u>392,878</u>
Actif Immobilisé (notes 1 et 2)	1,332,289	1,375,359
	<u>2,214,838</u>	<u>1,768,237</u>

ACTIFS DU FONDS EN FIDUCIE

Encaisse	58,380	53,507
Bonds et certificat de dépôt	5,343	5,343
Somme à recevoir de l'Association Dentaire Canadienne	—	847
Livres de la bibliothèque et mobilier (à la valeur nominale)	1	3,339
	<u>63,724</u>	<u>63,036</u>
	<u>\$2,278,562</u>	<u>\$1,831,273</u>

PASSIFS

Passif à court terme		
Comptes à payer	\$ 50,420	\$ 73,255
Revenu reporté	588,409	574,444
Somme à payer aux fonds en fiducie	—	847
Partie courante de la dette à long terme	6,000	6,000
	<u>644,829</u>	<u>654,546</u>
Dette à long terme (note 3)	448,094	453,729

SURPLUS

Surplus	1,121,915	659,962
	<u>2,214,838</u>	<u>1,768,237</u>

PASSIFS DU FONDS EN FIDUCIE

Comptes à payer	500	300
Fonds en fiducie pour la bibliothèque	57,455	56,666
Le fonds "Grieve Memorial Lectureship"	5,769	6,070
	<u>63,724</u>	<u>63,036</u>
	<u>\$2,278,562</u>	<u>\$1,831,273</u>

ÉTAT DES RÉSULTATS ET DU SURPLUS POUR L'EXERCICE SE TERMINANT LE 31 DÉCEMBRE 1981

	1981	1980
Revenus	Budget	Réel
Cotisations (annexe A)	\$1,766,419	\$1,781,072
Dons	36,500	45,185
Journal (annexe C)	337,700	315,312
Publications	30,000	42,331
Intérêt	25,000	104,902
Location	106,961	112,383
Autre (annexe B)	18,000	61,288
	<u>2,320,580</u>	<u>2,462,473</u>
Dépenses		
Honoraires et indemnités quotidiennes	143,250	168,998
Salaires et bénéfices	448,350	458,949
Frais généraux et administratifs (annexe D)	283,700	296,614
Conférences	29,000	48,178
Journal (annexe C)	396,550	376,993
Autres publications (annexe E)	57,000	51,813
Publicité institutionnelle	15,000	—
Frais de voyage et réunions (annexe F)	227,600	290,782
Gestion d'immeubles	215,000	225,697
Le mois de la santé dentaire	30,000	29,028
Les visites d'agrément	25,700	15,009
Le programme du test d'aptitudes dentaires	34,400	38,459
	<u>1,905,550</u>	<u>2,000,520</u>
Excédant des revenus sur les dépenses pour l'exercice	415,030	461,953
Surplus au début de l'exercice	659,962	659,962
Surplus à la fin de l'exercice	<u>\$1,074,992</u>	<u>\$1,121,915</u>

**ÉTAT DE L'ÉVOLUTION DE
LA SITUATION FINANCIÈRE POUR L'EXERCICE
SE TERMINANT LE 31 DÉCEMBRE 1981**

	1981	1980
Provenance des fonds		
Opérations		
Excédent des revenus sur les dépenses pour l'exercice	\$461,953	\$ 45,234
Item n'impliquant aucune sortie — de fonds — amortissement	57,296	44,688
	<u>519,249</u>	<u>89,922</u>
Utilisation des fonds		
Acquisition d'actifs immobilisés	14,226	35,627
Remboursement de la dette à long terme	5,635	5,626
	<u>19,861</u>	<u>41,253</u>
Argumentation (Diminution) du fonds de roulement	499,388	48,669
Fonds de roulement (déficitaire) au début de l'exercice	(261,668)	(310,337)
Fonds de roulement (Déficitaire) — à la fin de l'exercice	<u>\$237,720</u>	<u>(\$261,668)</u>

FONDS EN FIDUCIE POUR LA BIBLIOTHÈQUE

**ÉTATS DES RÉSULTATS ET DU SURPLUS
ÉTAT DES RÉSULTATS ET DES SURPLUS
POUR L'EXERCICE SE TERMINANT
LE 31 DÉCEMBRE 1981**

	1981	1980
Revenus		
Intérêts	\$ 9,648	\$ 4,760
Dépenses		
Reliure	67	164
Amortissement des livres et du mobilier	4,965	774
Abonnements	524	692
Fournitures et services	3,303	—
	<u>8,859</u>	<u>1,630</u>
Excédent des revenus sur les dépenses pour l'exercice	789	3,130
Surplus au début de l'exercice	56,666	53,536
Surplus à la fin de l'exercice	<u>\$57,455</u>	<u>\$56,666</u>

**APPROUVÉ PAR LE BUREAU DES GOUVERNEURS DE L'ADC
MARS 1982**

**NOTES AUX ÉTATS FINANCIERS
POUR L'EXERCICE SE TERMINANT
LE 31 DÉCEMBRE 1981**

1. Principales conventions comptables

- (a) Inventaire
L'inventaire est évalué au plus bas du prix coûtant et de la valeur nette probable de réalisation.
- (b) Amortissement
Le mobilier et l'équipement acheté après le premier janvier 1979 est imputé à la dépense au moment de l'achat.
L'actif immobilisé est amorti selon la méthode linéaire.
Immeubles — 40 ans
Améliorations locatives — 5 ans
Mobilier et équipement — 10 ans
- (c) Réalisation des revenus
Les revenus de cotisations et d'abonnements sont reconnus dans l'année auxquels ils se rapportent alors que les subventions sont reconnus comme revenus sur une base de caisse.

2. Actif immobilisé

	1981			1980
	Coût	Amort. Accum.	Valeur Nette	Valeur Nette
Terrain	\$ 82,915	\$ —	\$ 82,915	\$ 82,915
Immeubles	1,376,435	203,134	1,173,301	1,207,712
Améliorations locatives	63,358	20,710	42,648	43,730
Mobilier et équipement	88,309	54,884	33,425	41,002
	<u>\$1,611,017</u>	<u>\$278,728</u>	<u>\$1,332,289</u>	<u>\$1,375,359</u>

3. Dette à long terme

	1981	1980
Hypothèque	\$454,094	\$459,729
Partie courante de la dette à long terme	6,000	6,000
	<u>\$448,094</u>	<u>\$453,729</u>

L'hypothèque est renégociable chaque année. Le taux d'intérêt est actuellement de 15,25% par année.

LE FONDS "GRIEVE MEMORIAL LECTURESHIP"

**ÉTATS DES RÉSULTATS ET DU SURPLUS
POUR L'EXERCICE SE TERMINANT
31 DÉCEMBRE 1981**

	1981	1980
Revenus		
Intérêts	\$ 399	\$ 305
Dépenses		
Don à la section des orthodontistes de l'Association Dentaire Canadienne	700	300
Excédant des revenus sur les dépenses		
(Dépenses sur les revenus) pour l'exercice	(301)	5
Surplus au début de l'exercice	6,070	6,065
Surplus à la fin de l'exercice	<u>\$5,769</u>	<u>\$6,070</u>

Les Actualités

Dégâts au cabinet du dentiste : que faire pour être indemnisé ?

Le Régime d'assurance des dentistes du Canada recevra, en 1982, plus de 350 réclamations à la suite de sinistres survenant dans les cabinets de dentiste du pays. Ce nombre augmente d'une année à l'autre, de même que les sommes versées en remboursement. Cette augmentation est attribuable à deux causes :

- l'augmentation du nombre des réclamations;
- l'augmentation des frais de réparation ou de remplacement de l'équipement et des fournitures.

Au CDSPI, on a l'impression que peu de dentistes savent ce qui se passe lors d'un sinistre. Qui prévenir ? Que faire ? Que font les autres pour vous ? Pourquoi l'intervention des ajusteurs ? Quand serai-je payé ? Comment remplacer l'équipement ou les fournitures, si je n'ai pas l'argent en main ? Ce ne sont là que quelques-unes des nombreuses questions qui vous viendront à l'esprit, si vous avez la malchance de subir des dommages ou des pertes attribuables au feu, aux fuites d'eau, au vol ou au vandalisme.

Au cours d'un entretien récent, nous avons posé certaines questions au gérant des réclamations de la société d'assurance *Guardian*. Voici quelques-unes des observations que nous avons recueillies.

Le CDSPI

Selon votre expérience, quel est l'élément principal qui permet d'obtenir rapidement le remboursement d'un sinistre ?

Le gérant

Ce serait si facile, s'il n'y avait qu'un élément à considérer. Malheureusement, presque tous ceux qui réclament une indemnité ignorent les procédures élémentaires qui nous permettrait, à nous la compagnie d'assurances, d'obtenir l'information nécessaire pour verser l'indemnité.

Le CDSPI

Oh! Oh! La question n'est donc pas aussi simple. Que doit faire un den-

tiste s'il constate, un beau lundi matin, qu'il y a un pouce d'eau sur le plancher de son cabinet et s'il découvre peu après que l'eau a endommagé l'ordinateur de la banque au rez-de-chaussée ?

Le gérant

D'abord, il doit s'assurer que la soupape d'arrêt de la plomberie est bien fermée.

Deuxièmement, il doit en aviser la propriétaire de l'édifice et essayer de nettoyer la place.

Puis, il téléphone au CDSPI ou à l'ajusteur.

Le CDSPI

Le dentiste a parlé au CDSPI, obtenu le numéro de téléphone de l'ajusteur et joint celui-ci qui est en route pour le rencontrer et inspecter les dégâts. Qu'arrive-t-il alors ? Que fera l'ajusteur ?

Le gérant

L'ajusteur est engagé par la compagnie d'assurances pour recueillir l'information, interroger les témoins, évaluer les dégâts et présenter un rapport complet, y compris l'estimation des frais de réparation ou de remplacement de l'équipement ou des fournitures endommagés. L'ajusteur connaît aussi des gens pour nettoyer la place, sécher les tapis, etc.

Le CDSPI

Cela peut se faire très vite. En quelques heures peut-être, on peut commencer les travaux pour remettre en marche le cabinet du dentiste. Est-ce exact ?

Le gérant

Oui. Tout le monde a intérêt à limiter le plus possible l'inactivité du bureau. Quelques heures, quelques jours tout au plus.

Le CDSPI

L'indemnisation du sinistre peut prendre un certain temps. À quoi attribuer les délais ? Comment le dentiste peut-il les prévenir ?

Le gérant

Il n'y a pas de solution magique au

problème. Si vous me permettez un avis, voici ce que je dirais.

- a) Assurez-vous que vous avez une couverture adéquate, c'est-à-dire informez-vous du coût actuel de remplacement de l'équipement et des fournitures.
- b) Assurez-vous pour 80 p. 100 au moins du coût de remplacement, autrement, nous devrons appliquer la clause de co-assurance du contrat. Si vous êtes assuré pour la moitié seulement du coût de remplacement, nous ne paierons, en vertu de cette clause, que la moitié de la réclamation et c'est vous, le dentiste, qui assurez l'autre moitié.
- c) Si votre assurance couvre au moins 80 p. 100 du sinistre, nous paierons alors en entier les frais de réparation ou de remplacement. *Il faut* présenter des fractures pour prouver que le remplacement a été fait.
- d) Gardez un inventaire de l'équipement, des approvisionnements et veillez à en garder une copie ailleurs que dans votre cabinet. Des photographies de chaque pièce de votre cabinet peuvent aider grandement à établir l'étendue du sinistre.

Le CDSPI

À supposer qu'un dentiste se fasse voler un dactylo électrique, une grande quantité de fournitures, un appareil stéréophonique et divers autres articles, la perte peut s'élever à plusieurs milliers de dollars et il n'est pas toujours facile de trouver l'argent nécessaire pour les remplacer. Qu'arrive-t-il alors ?

Le gérant

Aucun problème. Si nous connaissons la situation, nous émettons un chèque au dentiste et au fournisseur conjointement, ou nous prenons les mesures pour faire livrer l'équipement chez le dentiste et payer directement le fournisseur.

Le CDSPI

Si le dentiste décide de ne pas rem-

placer l'équipement qu'il a perdu — par exemple, les voleurs lui ont pris un appareil stéréo qui lui a coûté 1 500 \$ il y a un an-, qu'arrive-t-il?

Le gérant

Si le dentiste décide de ne pas remplacer son stéréo, nous réglerons pour une somme qui tiendra en ligne de compte la dépréciation de l'appareil et nous lui enverrons un chèque à ce montant.

Le CDSPI

Vous venez de nous donner des renseignements élémentaires mais fort utiles. Aimeriez-vous, en conclusion, nous faire quelques observations sur les façons de prévenir les pertes?

Le gérant

C'est une question dont on pourrait parler pendant des heures, mais je dirais ceci : Le dentiste peut faire certaines petites choses pour prévenir les pertes. Par exemple :

1. Connaître son équipement, surtout les raccords de plomberie au fauteuil. Quel genre de raccords est-ce? Des raccords en plastique qu'ont met en place par une simple pression ou des raccords à collet qui sont préférables?
2. Ne laissez pas traîner les objets de valeur. Il faut garder les montres, les bagues et les autres bijoux sous clé quand on ne les porte pas.
3. Veillez à ce que les patients puissent laisser leurs effets personnels, tels les manteaux, dans un endroit sûr. Tant de chose disparaissent l'hiver si le porte-manteau est placé près d'une porte — c'est s'attirer des ennuis.
4. Posez de bonnes serrures à toutes les portes. Un système d'alarme peut aussi prévenir le vol, si le cabinet est situé au rez-de-chaussée et facilement accessible par les fenêtres.

5. Ayez suffisamment d'assurances. Il en coûte beaucoup moins cher de payer la prime que d'assumer les pertes encourues.
6. Fermez toujours la soupape d'eau de votre équipement à la fin de la journée, parce que la pression augmente invariablement au cours de la nuit.

Le CDSPI

Je vous remercie. Pourrions-nous continuer cet entretien une autre fois et, peut-être, examiner d'autres aspects de l'assurance générale? Je songe notamment à l'assurance du revenu.

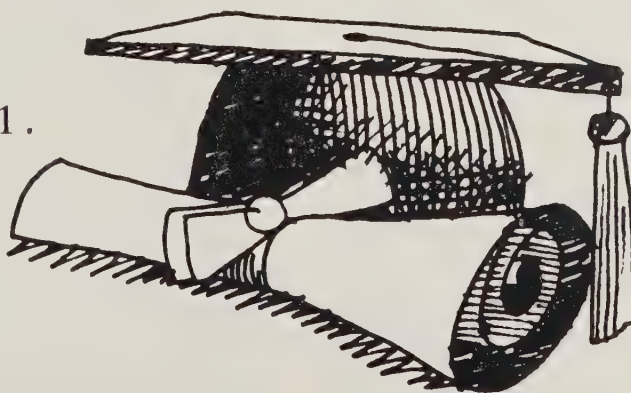
Le gérant

Certainement, n'importe quand. L'assurance-revenu est un excellent sujet. Je dirais même que c'est une question qui est, en général, plus obscure que les problèmes dus au vol ou à l'incendie.

VOUS QUI ÊTES UNE PERSONNE CULTIVÉE...

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Les patients drogués — le problème s'amplifie

Il y a quelque temps, le drogué, recourant à la ruse, s'adressait au médecin afin d'obtenir, sous prétexte de problèmes de santé, des ordonnances pour des drogues ou des stupéfiants dont la distribution est contrôlée.

Maintenant, le problème a atteint les dentistes.

Cet abus constitue "un problème sérieux," déclarait récemment M. Jacques G. LeCavalier, directeur du Bureau des drogues dangereuses, à la Direction générale de la protection de la santé, à Santé et Bien-être social Canada. M. LeCavalier émettait alors une mise en garde aux internes dentaires.

Grâce à la surveillance entreprise par le Bureau des drogues dangereuses, la pression exercée sur la profession médicale semble s'être quelque peu relâchée.

"Depuis le début de l'année 1981, nous avons noté que le problème est devenu plus fréquent chez les dentistes," faisait observer Mme. Denise Boucher, chef de la Division de la surveillance intérieure. "Quand le problème est endigué (pour la profession médicale), il semble ressurgir ailleurs." Il se pourrait fort bien, de dire Mme Boucher, que certains des mêmes drogués se tournent maintenant vers les dentistes, puisque les médecins font l'objet d'une surveillance plus intense.

"En surveillant la distribution des stupéfiants et des drogues contrôlées, nous observons que ces drogues sont prescrites plus souvent par les dentistes," a noté M. LeCavalier.

"Souvent, répondant à une enquête faite par le Ministère, le dentiste dira que la personne pour qui les drogues ont été prescrites a visité son bureau en période de pointe, se plaignant de douleurs. Il est évident que, fréquemment, le dentiste émet une ordonnance sans avoir examiné le patient au préalable. Les habitués consomma-

teurs de drogues sont très habiles à simuler des symptômes afin d'obtenir des stupéfiants ou des drogues contrôlées. De plus, certains ont découvert qu'ils pouvaient profiter de l'indifférence du dentiste. À plusieurs reprises, a remarqué M. LeCavalier, "nous avons découvert que ces personnes cherchent seulement à trouver des drogues pour satisfaire leur dépendance ou pour les revendre à profit."

De vieilles astuces

Dans certains cas, le dentiste a été dupé de manière à prescrire des stupéfiants plus puissants que d'habitude. Le drogué, recourant à une vieille astuce, met le praticien en concurrence avec ses collègues: rendant visite au dentiste au moment où il est très occupé, il réclame un remède d'urgence, affirmant que tel autre dentiste (ou médecin) lui a déjà prescrit une drogue qui "faisait des miracles." Trop occupé, le dentiste n'a pas le temps de vérifier auprès de son collègue si la demande est conforme à la vérité. Le rusé "patient" prendra rendez-vous pour un examen et un traitement peut-être, mais il aura garde de s'y présenter.

C'est pourquoi, prévient M. LeCavalier, "le dentiste doit se montrer extrêmement prudent lorsqu'un inconnu se présente en lui demandant un remède spécifique ou une ordonnance pour une drogue.

"Nous aimerions également souligner," de poursuivre M. LeCavalier, "que la Loi sur les stupéfiants, tout comme le règlement touchant les drogues contrôlées, indique que le praticien peut administrer, prescrire, donner, vendre ou fournir un stupéfiant ou une drogue contrôlée à une personne ou à un animal;

- a) seulement si la personne ou l'animal est un patient placé sous ses soins professionnels; et
- b) si le stupéfiant ou la drogue contrôlée est exigé suivant la maladie

pour laquelle la personne ou l'animal reçoit des soins.

"En ce qui concerne les dentistes, la prescription de ces drogues doit par conséquent être limitée aux maladies dentaires. Nous sommes certains," a conclu M. LeCavalier, "que nous pouvons compter sur la collaboration des dentistes afin de prévenir les abus."

Dans l'Ouest

Le problème ne se manifeste pas également dans toutes les parties du Canada, a indiqué Mme Boucher. "Il prévaut davantage dans les Prairies, — l'Alberta, la Saskatchewan et le Manitoba. Et maintenant, il s'étend au Québec. Nous pensons donner l'alerte avant que la situation n'empire."

Le bureau des drogues dangereuses découvre la plupart des abus commis en vérifiant les dossiers des ordonnances chez les pharmaciens et autres marchands de drogues.

Le praticien qui semble avoir prescrit des quantités inhabituelles de stupéfiants et de drogues contrôlées est alors mis en garde et invité à se montrer "plus prudent avant de donner une ordonnance," a dit Mme Boucher, "Le dentiste doit pouvoir justifier ce qu'il fait. Sa responsabilité est entière."

Par ailleurs, les inspecteurs obtiennent parfois des indices touchant les abus soit des membres des familles en cause, soit d'autres professionnels, soit de la police. Il arrive qu'un agent appréhende un drogué qui laisse échapper: "Va voir le Dr Untel, il te donnera une ordonnance."

Quand le problème a commencé à se manifester au début de l'année 1981, le Bureau des drogues dangereuses est intervenu pour appliquer une mesure de contrôle en reclassant certains produits contenant de l'oxycodone et de l'hydrocodone comme stupéfiants purs. Ces produits peuvent être prescrits sur ordonnance seulement, et non plus par téléphone.

Grande amélioration de la santé dentaire en Colombie-Britannique

Une étude, menée en 1980 par la Division des services de la santé dentaire au Ministère de la santé de la Colombie-Britannique, révèle que la santé dentaire des enfants de cette province s'est grandement améliorée au cours des 20 dernières années.

Le résultat le plus spectaculaire porte la diminution du nombre des extractions. L'étude, qui a été publiée récemment, indique par exemple que la moyenne des extractions chez les adolescents de 15 ans est passée de 1,1 pour la période de 1958 à 1960, à 0,6 pour la période de 1967 à 1974, puis à 0,1 en 1980.

L'étendue des maladies dentaires mesurée en termes de caries, de perte des dents et d'obturations, a diminué de 44 p. 100, passant de 12,4 à 10,0, puis à 6,9, pour les périodes mentionnées ci-dessus.

Le rapport conclut que le nombre des cas non traités "semble bien en deça de la capacité de la profession dentaire actuelle dans toutes les régions de la province".

L'étude a porté sur 8 268 enfants de 5, 9, 13 et 15 ans, et on a constaté que la majorité d'entre eux recevait les soins dentaires appropriés.

L'étude montre que le degré d'hygiène buccale s'améliore en général, et de façon certaine avec l'âge. Les données indiquent qu'il y a un rapport direct entre le degré d'hygiène buccale et l'importance de la périodontite dont l'incidence de cas graves est faible, selon le rapport.

L'indice de quantité

On a eu recours à l'indice de quantité pour regrouper les enfants selon l'importance de leurs besoins en traitements orthodontiques. C'était la première fois qu'une étude provinciale sur la santé dentaire suivait cette méthode dont voici les principaux résultats. Apparemment, trois ou quatre pour cent des enfants de la province

ont des malocclusions qui présentent de sérieux troubles physiques. Cinq pour cent ont des malocclusions qu'il serait "fortement souhaitable de corriger". Treize pour cent des enfants qui ont fait l'objet de l'étude reçoivent déjà des traitements en orthodontie. Le rapport note cependant que ce ne sont peut-être pas ceux qui souffrent des malocclusions les plus graves.

L'étude attribue les améliorations constatées dans le domaine de la santé dentaire à divers facteurs, tels l'amélioration des programmes de santé publique, le souci de prévention d'une profession dentaire plus forte, une plus grande sensibilisation des parents et des enfants aux moyens de prévenir la maladie, l'utilisation de dentifrices au fluorure et la fluoration de l'eau potable.

Si l'on considère les traitements de restauration qui ont été complétés, l'étude indique que leur importance augmente avec les groupes d'âge. Pour l'ensemble de la province, l'importance des soins atteint un niveau de 66,5 chez les enfants de neuf ans, de 77,4 chez ceux de 13 ans et de 81,4 chez les jeunes de 15 ans. Les analystes notent:

Moins de perte des dents

Les analystes soulignent que la partie "la plus encourageante" de l'étude porte sur la perte des dents. Dans les études antérieures, on avait constaté, chez 100 enfants de 9 ans, la perte de 20 dents permanentes en moyenne. En 1980, on a constaté qu'il leur en manquait une seulement. De la même façon, entre 1968 et 1974, les études ont fait voir la perte de 50 dents permanentes par 100 enfants de 13 ans, alors que l'étude de 1980 en a dénombré huit. Chez le groupe des 15 ans, le nombre de dents manquantes est passé de 80 à 14.

Le pourcentage des enfants n'ayant pas besoin de soins dentaires a augmenté d'une étude à l'autre pour cha-

que groupe d'âge. Pour la période de 1958 à 1960, 35,6 p. 100 des enfants de cinq ans ne présentaient aucune carie; le pourcentage est monté à 63,16 p. 100 en 1980. Pour les mêmes périodes de temps, le pourcentage des jeunes de 15 ans n'ayant pas besoin de traitements est passé de 15,0 p. 100 à 57,93 p. 100.

L'étude avait pour buts:

- d'évaluer la santé dentaire de groupes précis d'enfants en estimant la prévalence de la carie, de la périodontite, des malocclusions, des anomalies dento-faciales et d'autres lésions pathologiques;
- d'établir les variances de la prévalence des maladies et des anomalies dentaires d'une région à l'autre;
- d'établir la mesure dans laquelle les services dentaires actuels répondent aux besoins et d'évaluer les besoins non comblés chez la population infantine;
- d'établir une base de comparaison qui servira à évaluer, à l'avenir, les services de soins curatifs et préventifs, financés à même les deniers en vertu de programmes comme le régime de soins dentaire de Colombie-Britannique;
- de répondre aux besoins de recherche en dentisterie du Ministère de la santé;
- d'établir, dans la mesure du possible, les rapports avec d'autres études provinciales sur la santé.

L'étude a été menée au cours de l'année qui a précédé l'entrée en vigueur du régime de soins dentaires de la Colombie-Britannique, le 1^{er} janvier 1981.

Elle a été dirigée par le Dr H. Jack Hann, consultant régional en dentisterie pour l'Île de Vancouver et chargé de mission, qui a préparé la majeure partie du rapport avec la participation du Dr Douglas Yeo, doyen associé de la faculté de dentisterie à l'Université de Colombie-Britannique.

10 manières d'améliorer vos assurances ... en payant moins cher.

Il est vite fait de payer \$ 2 000 ou plus de prime d'assurance par an ... sans pour autant être bien protégé. Si vous voulez économiser tout en étant mieux protégé, les suggestions ci-dessous pourront vous être utiles.

1. De nombreux assureurs préfèrent vendre des assurances vie et invalidité à primes constantes, c'est-à-dire qui n'augmentent pas au fur et à mesure que vous vieillissez. En fait, vous payez plus aujourd'hui pour pouvoir payer moins demain. En période de forte inflation, ce système avantage l'assureur. Il est habituellement plus économique de souscrire un contrat à prime croissante, c'est-à-dire dont la prime augmente au fur et à mesure que vous vieillissez. Ce type de contrat vous donne toujours une assurance moins chère au cours des premières années, ce qui vous permet d'affecter la différence à la réduction de vos dettes ou à des placements.
2. Pensez à payer vos primes trimestriellement plutôt qu'annuellement. Avec les taux d'intérêt actuels, conservez votre argent en banque le plus longtemps possible. Avec le régime d'assurance des dentistes du Canada, la prime est la même, que vous la payez tous les trois mois ou tous les ans.
3. Plus la franchise est faible plus la prime est élevée. Sur l'assurance du contenu par exemple, vous pouvez économiser entre 10 et 15 % en faisant passer votre franchise de \$ 250 à \$ 500. Le même principe s'applique à vos assurances Habitation et Automobile.
4. Conservez des listes à jour du contenu de votre domicile et de votre bureau, sans quoi vous pourriez oublier certaines choses dans votre demande d'indemnité après un gros sinistre.
5. Les indemnités d'invalidité (accident ou maladie) ne sont versées qu'après une certaine période d'attente. Plus celle-ci est courte plus la prime est élevée. Envisagez la possibilité de passer à une période d'attente plus longue et d'affecter les économies ainsi réalisées à des placements ou à une augmentation de vos garanties de base.
6. Les assureurs se font tous concurrence et les prix varient d'un contrat à l'autre et d'une compagnie à l'autre. Quelques comparaisons vous permettront de réaliser des économies appréciables. Les consultants du CDSPI peuvent vous aider à mieux voir les différences existant entre deux contrats et donc à mieux comparer les prix.
7. Les assurances vie qui combinent un élément "épargne" et un élément "assurance" sont souvent chères, peu rentables et plus difficiles à comprendre. Dans la plupart des cas, il est plus avantageux de souscrire une assurance temporaire et de mettre sur pied, en parallèle, un programme d'épargne et de placement.
8. L'assurance la plus chère de toutes sera toujours celle dont les garanties se révéleront insuffisantes à la suite d'un sinistre grave. Veillez donc à ce que vos garanties soient à jour et faites couvrir vos biens pour un montant correspondant à ce que vous devriez payer pour les remplacer à l'heure actuelle. Aux renouvellements, n'oubliez pas d'ajouter la valeur de tous biens acquis en cours d'année.
9. Même avec de bonnes garanties, un sinistre vous fera perdre du temps et de l'argent. Quelques mesures simples vous aideront à prévenir les sinistres : ayez de bonnes serrures, de bonnes portes, de bonnes fenêtres ; vérifiez toujours avant de partir que l'arrivée d'eau de votre fauteuil d'opération est coupée.
10. Ne vous assurez pas contre les petits sinistres que vous pouvez supporter. Assurez-vous contre les gros sinistres qui pourraient vous mettre en difficulté.

L'une des principales caractéristiques du régime d'assurance des dentistes du Canada réside dans l'aide et les renseignements offerts aux membres de la profession. Nos consultants étudieront les propositions qui pourront vous être faites ou pourront vous aider à analyser vos besoins.



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En bref —

La firme Hoffman-LaRoche Limitée, de Vaudreuil (Québec) a fait une mise en garde contre le produit nommé "Rocaltrol". Récemment introduit sur le marché canadien, ce produit n'est pas destiné à servir comme supplément de la vitamine D "pour les simples cas d'affection dentaire."

Consommé sans précautions médicales appropriées, ce produit peut être fatal pour le patient, déclare le Dr Sheila McKenzie, gérante des services professionnels de la division pharmaceutique de la compagnie.

Dans une lettre adressée à l'ADC, le Dr McKenzie affirme que le Rocaltrol (calciférol) est un métabolite actif très puissant de la vitamine D. On le prescrit pour traiter l'hypocalcémie ou l'ostéodystrophie chez les patients souffrant d'insuffisance rénale chronique qui sont soumis à une dialyse, ainsi que l'hypocalcémie et ses manifestations cliniques associées à l'hypoparathyroïdie post-opératoire, à l'hypoparathyroïdie idiopathique et à la pseudo-hypoparathyroïdie, ou dans les cas de rachitisme résistant à la vitamine D.

Il faut disposer d'un équipement de laboratoire adéquat pour surveiller les réactions chimiques qui se produisent dans le sang et dans l'urine des patients traités pour ces maladies. Pendant le traitement, l'hypocalcémie progressive causée par une dose excessive ou par une trop grande absorption peut devenir grave au point d'exiger des soins d'urgence, prévient le Dr McKenzie.

Un nouveau répertoire, énumérant tous les équipements et produits servant à l'administration des soins médicaux — et dentaires — qui sont fabriqués au Canada, risque de décevoir les institutions dentaires.

Publié par le ministre de l'Industrie et du Commerce du Canada en décembre

1981, ce répertoire s'intitule: "Produits d'hygiène fabriqués au Canada" et se limite aux produits de fabrication canadienne. Cependant, comme le Canada compte peu de fabricants de produits dentaires, la liste en est très brève et nullement complète.

Les articles comme les ciments dentaires, les pellicules radiographiques, la soie floche, les fils de suture et les équipements dentaires, sont tous groupés sous une même rubrique. Cependant, justement à cause du nombre limité de fabricants dentaires canadiens, ce répertoire n'est guère utile pour les établissements dentaires.

Cependant, il est sans doute plus pratique pour la profession médicale, puisque plusieurs produits médicaux sont fabriqués au Canada. Le répertoire énumère environ 300 compagnies et 1 500 produits.

Bien que l'École dentaire de l'Université Dalhousie dispose d'installations pour l'enseignement qui sont les plus modernes au Canada, elle bénéficie de peu d'appui pour la recherche de la part du public et des sources privées.

De fait, l'école se place au cinquième ou sixième rang parmi les dix écoles dentaires du Canada sur toute liste de subventions, rapporte le *Mail Star* d'Halifax, citant le Dr Derek Jones, chef de la Division des biomatériaux dentaires et membre du comité qui révisé les demandes de bourses dentaires, lequel fait partie du Conseil de recherches médicales, à l'Université Dalhousie.

Les écoles dentaires se font concurrence et sont en concurrence avec les écoles médicales afin d'obtenir des subventions pour la recherche.

Il va de soi que les écoles médicales sont plus favorisées et offrent un plus grand choix de sujets aux chercheurs.

Le Conseil de recherches médicales, société d'État qui est officiellement chargée d'octroyer des bourses de recherche en médecine et en dentisterie, alloue, pour chaque dollar dont il dispose, 1,5 sous pour la recherche dentaire. Le reste est concédé aux écoles médicales, fait observer le Dr Jones.

De l'avis du Dr Mouton, le meilleur moyen de se nettoyer les dents après les repas est, à part les brosser, de mâcher de la gomme. Recherchiste dentaire, le Dr Mouton habite Québec et fait partie de la Faculté de médecine dentaire de l'Université Laval en tant que microbiologiste et immunologiste.

En mâchant de la gomme, on stimule la production de la salive qui aide à dissoudre le sucre qui adhère aux dents et à éliminer les acides créés par le sucre et les bactéries causant des caries.

Le 31 juillet 1982 est la date limite pour soumettre à Santé et Bien-être social Canada des projets et des demandes de bourses de carrière pour la recherche, si l'on désire se qualifier pour une subvention à compter du 1^{er} avril 1983.

La plupart des demandes de renouvellement doivent être soumises également pour le 31 juillet.

En vertu du Programme national de recherche et de développement en matière de santé, le Ministère de la Santé a pu venir en aide aux chercheurs dans plusieurs domaines visant à atteindre les objectifs nationaux en matière de santé. En médecine dentaire, Murray Hunt de l'Université de Toronto a reçu, en 1977, une bourse de 224 434,61\$ pour faire une étude des effectifs dentaires par rapport à l'état de santé buccale de la population

Les Actualités

ontarienne. La Montréalaise Claire Infante-Rivard a obtenu 68 440,29\$ pour étudier la prévalence et l'incidence de la carie, de la malocclusion et des maladies parodontaires chez les enfants d'âge scolaire dans la région de Montréal.

Le Dr George E. Decker vient d'abandonner le poste de rédacteur en chef de l'*ADA News Information*, publication officielle de l'Association dentaire de l'Alberta. Il a également été directeur administratif de l'ADA pendant plusieurs années.

Le président de l'association, le Dr P.J. Kirby, lui a remis une plaque en guise de reconnaissance.

Le Dr Gregory White de Regina a été nommé président du Collège des chirurgiens dentistes de la Saskatchewan pour 1982.

Diplômé de l'Université de l'Alberta, le Dr White pratique à Regina depuis 1962.

Les autres membres élus sont le Dr B.E. White, vice-président, et les Drs W.M. McKechnie, W.P. Reed, G.A. Riekman, J.K. Sutherland et E.W. Zak, membres du Conseil.

Dans le rapport annuel sur le régime d'assurance dentaire de la Saskatchewan pour 1980-1981, on note que le nombre des personnes qui y ont souscrit est élevé, comprenant 129 669 enfants âgés de quatre à quinze ans, soit 83,5 pour cent des enfants admissibles.

La majorité de ces enfants ont reçu des soins complets de la part de dentistes, de thérapeutes et d'assistants dentaires travaillant dans les 505 cliniques établis dans les diverses écoles primaires de la province. Des praticiens privés ont également administrés des soins d'urgence à des enfants par-

ticipant au régime pour une somme s'élevant à 348 000\$.

Les dépenses totales du régime pour l'année 1980-1981 atteignent 10,9 millions de dollars, soit une moyenne de 77,40\$ par enfants inscrit.

Le Dr Anthony Melcher, directeur du groupe affecté à la physiologie parodontaire pour le Conseil de recherches médicales, à la Faculté dentaire de l'Université de Toronto, a accédé à la présidence de l'Association internationale pour la recherche dentaire, lors du congrès annuel tenu à la Nouvelle Orléans, du 18 au 21 mars dernier. À la même occasion, le Dr A.R. Ten Cate, doyen de la Faculté, a été élu vice-président de l'association qui groupe environ 5 000 membres. Il assumera donc la présidence à son tour en 1984.

La Faculté dentaire de l'Université de Toronto détient un record unique: depuis que l'association a été fondée en 1919, quatre de ses membres en ont été ou en seront présidents. En effet, cet honneur a été accordé au Dr A.E. Webster, qui a été le troisième président de l'association, et au Dr George Beagrie qui a assumé le poste en 1977-1978. Outre les Drs Melcher et Ten Cate déjà mentionnés, il convient de noter que le Dr Jack McDonald, président de l'association en 1968-1969, est un ancien étudiant de l'Université de Toronto.

Le 70^e Congrès annuel de la Fédération dentaire internationale se tiendra à Vienne, du 10 au 16 octobre 1982.

Les conférences scientifiques et les séances d'administration de la FDI auront lieu dans les salles d'État du Hofburg de Vienne. Conçu par les comités d'organisation et du programme scientifique de la FDI, le program-

me portera particulièrement sur la dentisterie pour les gens âgés, — l'Assemblée générale des Nations Unies a déclaré 1982 l'année internationale des gens âgés, — établira une comparaison entre les traitements chirurgicaux et non chirurgicaux dans les cas de maladie parodontaire avancée, et étudiera les solutions de rechange pour les alliages à base des métaux nobles.

Conjointement avec le Congrès de la FDI, il y aura une exposition dentaire internationale qui se tiendra à Vienne également.

On peut se procurer des formulaires d'inscription et le programme provisoire du congrès en s'adressant au directeur administratif de la FDI, 64 Wimpole Street, London W1M 8AL, Royaume-Uni, ou au Secrétariat du Congrès de la FDI 1982, Interconvention, C.P. 80 A-1107, Vienne, Autriche.

Dans le cadre du 13^e Congrès international du cancer qui aura lieu à Seattle (Washington), du 8 au 15 septembre 1982, le programme scientifique comprendra des discussions et des mises à jour importantes touchant les divers domaines de l'oncologie, y compris la dentisterie.

Des représentants de 95 pays et des experts qui s'occupent de la prévention, du contrôle et du traitement du cancer participeront au congrès qui est placé sous l'égide de l'Union internationale contre le cancer (UICC). On prévoit qu'y assisteront environ 12 000 personnes qui participent à la recherche sur le cancer, posent des diagnostics, donnent des soins permanents aux cancéreux, rééduquent les patients et leurs familles ou s'occupent de diffuser des renseignements sur le cancer.

L'intérêt particulier pour les oncologistes dentaires, des programmes

consacrés au rôle grandissant de la dentisterie comme une spécialité de l'oncologie étudieront le traitement de la néoplasie dans la cavité buccale et comprendront une révision de sujets choisis.

Parmi les cours donnés en éducation permanente, l'un portera sur le cancer de la tête et du cou. On y parlera des aspects dentaires, de la cavité buccale, du larynx, de la chimiothérapie et de la radiothérapie.

Pour obtenir d'autres renseignements sur le programme et des formulaires d'inscription, on s'adressera au: Congress Office, Suite 1800, Fourth and Blanchard Building, Seattle, Washington, 98121, U.S.A.; tél.: (206) 621-9440. Veuillez noter que les réservations d'hôtel faites après le 31 juillet 1982 ne seront pas garanties.

Dernièrement, en Afrique du Sud, les dentistes ont eu un problème de taille à résoudre.

L'éléphant femelle Homly, ancienne pensionnaire du zoo de Bloemfontein, souffrait d'une carie grosse comme un poing d'homme dans l'une de ses énormes molaires. Avec assez d'anesthésique pour tuer 70 personnes, 17 dentistes, médecins, vétérinaires et techniciens se sont appliqués à libérer la malheureuse de son mal.

Les dentistes ont dû combler la cavité avec 200\$ d'amalgame. L'opération a duré 90 minutes.

L'hépatite virale B est une maladie redoutable et, lors d'une conférence tenue au siège social de l'Association dentaire américaine, à Chicago, du 14 au 16 avril, on a étudié ses rapports avec la dentisterie.

Patronnée par le Conseil des thérapies dentaires de l'ADA et le Collège dentaire de l'Illinois, la conférence a

réuni 200 invités des écoles dentaires et des sociétés dentaires des États-Unis.

"L'hépatite constitue un problème qui prend toujours plus d'ampleur, surtout pour les professionnels de la santé, tels les dentistes," a observé le secrétaire du Conseil des thérapies dentaires, le Dr Edgar Mitchell.

"Durant cette conférence," a-t-il ajouté, "l'ADA a tenté de renseigner le plus grand nombre possible de représentants des divisions dentaires sur les dangers de cette maladie."

Un des principaux sujets de la conférence a été la récente mise au point d'un vaccin contre l'hépatite virale B qu'on prévoit mettre sur le marché plus tard cette année.

On s'est également penché sur le problème que pose la transmission de l'hépatite, sur les implications légales et éthiques qu'elle a en dentisterie, et sur toutes les connaissances actuelles y ayant trait.

La *Henry J. Kaiser Family Foundation*, de Manlo Park en Californie, a octroyé à l'*American Fund for Dental Health* (le Fonds américain pour la

santé dentaire) une subvention de 150 000\$ répartie sur trois ans, afin de fournir des bourses aux étudiants dentaires des minorités. C'est la deuxième fois que la Fondation Kaiser accorde une telle subvention à l'AFDH.

Le programme de bourses d'études à l'intention des étudiants dentaires des minorités a été lancé en 1968. Depuis, 631 bourses ont été distribuées, totalisant 1,44 million de dollars.

En annonçant la nouvelle, le président de la fondation, le Dr Robert J. Glaser, a déclaré: "Le personnel et l'administration de la fondation reconnaissent que les minorités sont mal représentées en dentisterie. Ils sont heureux de la manière dont les fonds de la première subvention ont été utilisés pour permettre aux étudiants des minorités de poursuivre des études en dentisterie."

Depuis sa création, le programme en faveur des minorités a été financé entièrement par des subventions et d'autres dons alloués spécifiquement par leurs auteurs à cette fin. Les minorités désignées comme étant mal représentées en dentisterie sont les Noirs américains, les autochtones américains, les Américains d'origine mexicaine et les Portoricains.

Régime d'épargne-retraite de l'ADC

Les valeurs respectives du Régime d'épargne-retraite de l'Association Dentaire Canadienne étaient les suivantes au 31 avril 1982.

Fonds d'actions ordinaires	\$48.5894
Fonds à revenu fixe	\$27.5881
Fonds garanti	\$23.0555
Fonds de placement	\$10.7737

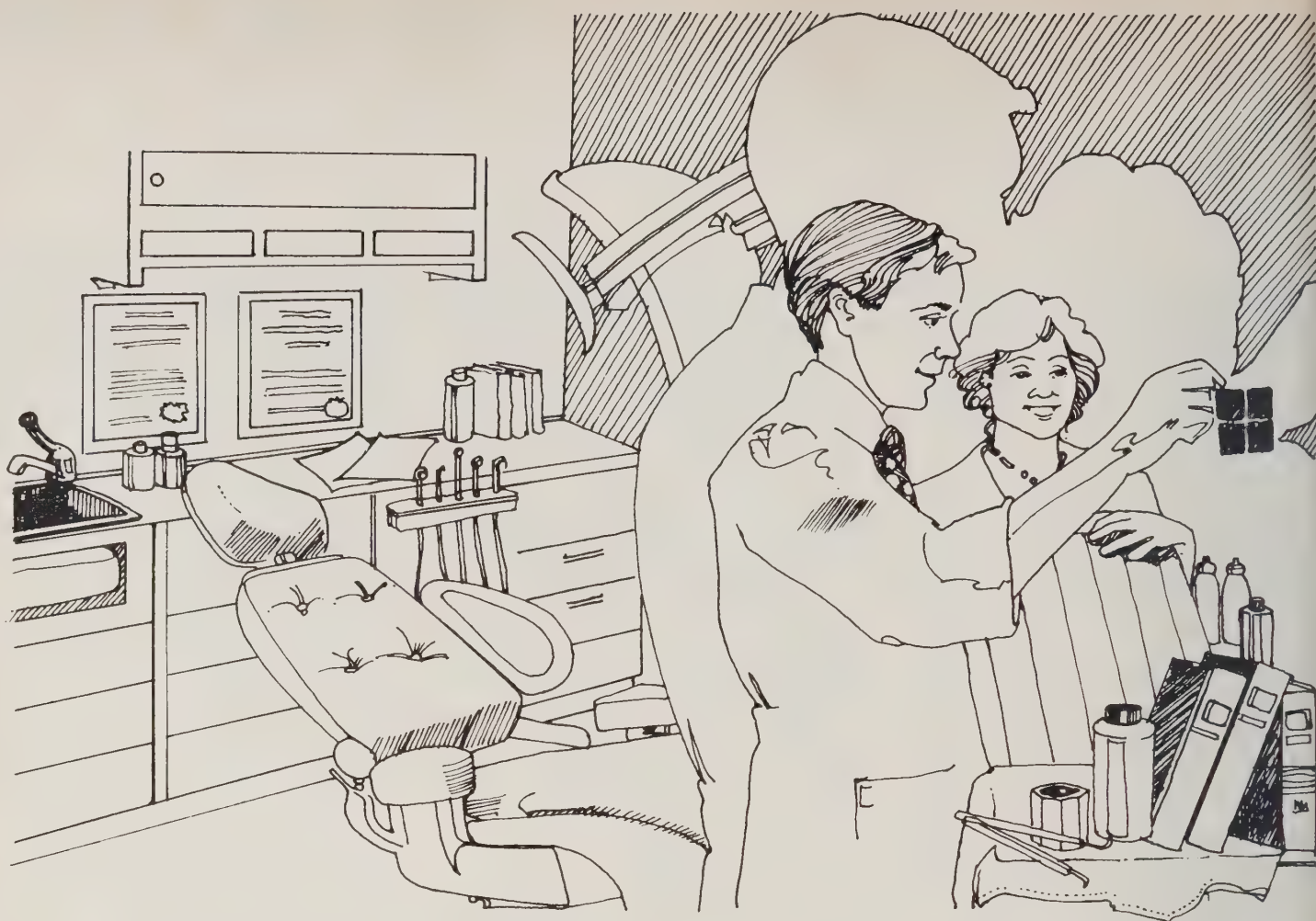
L'avoir total (valeur marchande) du régime s'élevait à \$29,975,216.

Au 31 mars 1982, les chiffres du mois précédent étaient les suivants:

Fonds d'actions ordinaires	\$48.2710
Fonds à revenu fixe	\$27.1051
Fonds garanti équilibré	\$22.7908
	\$11.0596

L'avoir total (valeur marchande) du régime s'élevait à \$29,963,929.

Pour de plus amples renseignements, veuillez écrire à l'adresse suivante: Canadian Dental Service Plans Inc., 2 St. Clair Ave. E., Toronto, Ontario, M4T 2W1, ou appeler le service de renseignements du CDSPI en composant 1-800-268-3792 (961-7117 pour les résidents de Toronto).



Savez-vous que les Forces canadiennes ont un programme de formation de dentistes militaires qui peut subventionner le coût de vos études en art dentaire pour un maximum de 45 mois?

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Essentials of Complete Denture Prosthodontics

Sheldon Winkler, editor

*W.B. Saunders Company,
Philadelphia, London, Toronto
1979.
729 pages.*

This book is another of the many excellent textbooks on complete dentures available today. It developed from the editor's 1977 Dental Clinics of North America issue, on the same subject. Some of the original chapters were revised and 14 new chapters added.

The text is intended to follow a biologic rather than a mechanical approach to complete denture construction. The contents are organized into four parts: The Edentulous Patient (3 chapters

and 62 pages), The Construction of Complete Dentures (17 chapters and 404 pages), The Maintenance of Complete Dentures (4 chapters and 50 pages), and Special Techniques and Problems (9 chapters and 188 pages).

Thirty people contributed to provide the thirty-three chapters into which this book is divided. Thus, some variations in the text are evident. Chapters differ in length and depth of discussion, quality of diagrams and photographs, and the presence of adequate references. However, because several authors and their philosophies were allowed scope for presentation, areas of information were presented that are not available in other texts. The chapters that discuss Residual Ridge

Resorption, and the History of Development of Posterior Tooth Forms contain data that are not readily available elsewhere.

The editor's intention is to provide a comprehensive text. Thus, many topics are included and discussed in the book by several contributors and despite any editor's most assiduous efforts, some repetition occurs. We are warned of this in the preface and if that is taken into consideration, the book presents useful information and several viewpoints to assist the reader in making complete dentures.

This book was reviewed by A. Fenton, DDS, MS, FRCD(C) Associate Professor of Prosthodontics, University of Toronto.

Atlas clinique de prothèses combinées

Georges Papathanassiou
Julien Prêlat, éditeur

*17, rue du Petit-pont
Paris 5^e
168 pages.*

Cet ouvrage, sans prétention, présente vingt-cinq cas clinique avec autant de suggestions de traitement par prothèses combinées.

Dans son préambule l'auteur reconnaît lui-même, que les solutions présentées ne sont pas toujours les meilleures à tous les points de vue, ni les plus conformes aux concepts modernes.

L'Atlas clinique, puisqu'il faut l'appeler par son nom, ressemble d'avantage à un livre de recettes qu'à un livre de référence. On insiste beaucoup trop sur le côté mécanique et technique du traitement. Les attaches de précision y

sont employées à profusion. On les retrouve sous forme intra-coronaires, extra-coronaires, sous forme de boutons, de barres, de charnières, etc.

L'auteur fait preuve de beaucoup d'ingéniosité et de créativité pour atteindre son objectif qui semble être constamment l'esthétique d'abord. Sur ce point, les résultats sont formidables. Dans presque tous les cas on peut noter l'absence ou le camouflage des crochets conventionnels. Le point faible de l'ouvrage c'est le peu d'importance que l'on accorde à la distribution des stress occlusaux sur les dents, et les structures de support. Dans plusieurs cas, en effet, l'auteur nous montre des bases qui ne couvrent pas la surface optimale des crêtes résiduelles, ou encore, il suggère des attaches extra-coronaires qui appli-

quent les stress occlusaux dans une direction toute autre que celle de l'axe long de la dent pile. À aucun endroit il n'est fait mention de la longévité des prothèses en bouche.

Ce livre présente 256 photographies dont la qualité laisse grandement à désirer. C'est d'ailleurs la grande variété des cas et l'abondance de l'illustration qui fait l'intérêt de l'ouvrage. L'opérateur moyen peut y puiser des idées qui l'amèneront peut être à solutionner le problème qui le préoccupe. Il y a des chances, en effet, que l'on trouve dans ce vaste étalage un cas qui ressemble à la situation du patient que l'on est en train de traiter.

Critique par Normand Brien, DDS, MS, Faculté de médecine dentaire Université de Montréal

Textbook of Operative Dentistry

Baum/Phillips/Lund

W.B. Saunders — \$40.00

This text reflects the combined efforts of two highly acclaimed teachers and clinicians in the field of operative dentistry along with a world authority in the related field of dental materials and, as such, provides a solid framework for the treatment of dental disease. Prospective purchasers of any text have varied expectations with respect to its content. However, in this text they are advised by the authors in the preface that many chapters are inclined to a "How to do approach". Consequently, the book was not sufficiently basic for undergraduate dental students at the first or second year level, who require a text which more thoroughly schools them in the fundamentals of cavity preparation and restoration. Those who have "learned to walk", namely, senior dental students and practising dentists will benefit more from the authors' expertise in applying basic concepts to the atypical problems of daily practice.

The authors are to be commended for establishing a focus for the text in the early chapters which deal concisely with prevention and biological considerations for operative procedures. This reminds us of our primary roles of preventing dental disease and minimizing its ill effects by and after treatment. These are followed by chapters on instrumentation, handgrasps and operating positions which are discussed thoroughly and augmented by photographs and excellent line drawings. The chapter on rubber dam is excellent and demonstrates the value of the authors' "How to" approach with a variety of helpful hints such as clamp selection and the customizing of stock clamps to suit difficult clinical situations. Highly commenda-

ble is the approach to the treatment of the carious lesion by establishing a treatment rationale for superficial, moderate and deep lesions. Unfortunately, the authors allow personal biases to override strong clinical research in their attitude to indirect pulp capping. They suggest that the decision to provide this form of treatment should be partially based on the patient's possible desire to "go for broke." This lamentable flaw, although minor, should have been avoided.

A major strength is the presentation of the various dental restorative materials. The reader will appreciate the topical nature of these chapters since they include the new high copper amalgams, microfilled composite resins and the glass ionomer cements for class V abrasion and erosion restorations. Unfortunately, the lag time of publication prevented any inclusion of the new white light curing resin systems which are already supplanting the old UV systems. The final chapters deal with cast metal and porcelain bonded to metal restorations and receive adequate, competent coverage.

A fitting closure to the book is the section on the re-inforcement of the endodontically treated tooth. As the authors suggest, "restoration of the pulpless tooth is probably the greatest challenge for the operative dentist." They presented the conventional cast post and core and considerable material on the wide variety of prefabricated systems along with their customary helpful hints. The subject is absent from many operative texts but here it receives the coverage it deserves.

In summary, the book compares most favourably with other operative texts currently available.

This book was reviewed by James Brown, Faculty of Dentistry, University of Toronto.

In the May edition of the CDA Journal, we regret that through a technical mishap, the name of reviewer **Dr. H.S. Katz**, Assistant Professor of Pharmacology and Therapeutics (Dental) McGill University Faculty of Dentistry, was omitted. He along with Dr. B.G. Benfey, had reviewed **Pharmacology and Therapeutics for Dentistry**.

CDA Retirement Savings Plan

Unit values of the Canadian Dental Association's Retirement Savings Plan stood as follows on April 31, 1982.

<i>Common Stock Fund</i>	\$48.5894
<i>Fixed Income Fund</i>	\$27.5881
<i>Guaranteed Fund</i>	\$23.0555
<i>Balanced Fund</i>	\$10.7737

Total assets (market value) of the plan were \$29,975,216.

The previous month's figures, as of March 31, 1982, stood as follows:

<i>Common Stock Fund</i>	\$48.2710
<i>Fixed Income Fund</i>	\$27.1051
<i>Guaranteed Fund</i>	\$22.7908
<i>Balanced Fund</i>	\$11.0596

Total assets (market value) of the plan were \$29,963,929.

For further information write to: Canadian Dental Service Plans Inc., 2 St. Clair Ave. E., Toronto, Ont. M4T 2W1 or call the central information services of CDSPI At 1-800-268-3792 (961-7117 in Metro Toronto).

Nursing Bottle Syndrome; prevalence and etiology in a non-fluoridated city

G.D. Derkson, DMD
Vancouver, B.C.

Patti Ponti, BHE
Vancouver, B.C.

SUMMARY

1. Nursing caries syndrome is a serious disease affecting at least 3.2 per cent of the population.
2. The etiology of nursing caries syndrome appears to be multifactorial. Some of the factors which seem to be involved are:
 - (a) education status of parents
 - (b) prolonged daytime bottle or breast feeding
 - (c) night and naptime bottle or breast feeding
 - (d) the age of eruption of incisors, and
 - (f) fluoride supplementation of the diet.

INTRODUCTION

Nursing bottle syndrome is a disease of preschool children involving caries of the primary teeth.¹ It is also known by the names nursing bottle caries, bottle mouth syndrome, and baby bottle syndrome.

Nursing bottle syndrome can vary in severity, but always follows a distinct pattern of carious destruction of the teeth. As seen in the photographs. (**Figure 1** and **Figure 2**), the teeth are affected in the order in which they erupt, the maxillary incisors being the first and most severely affected. A distinguishing feature of nursing bottle syndrome is the freedom of the lower incisors from carious lesions (**Figure 2**).

Nursing bottle syndrome can affect all surfaces of the incisor teeth, and often is initiated on the lingual surfaces. In such cases the caries may progress to pulpal involvement before the parent becomes aware of the problem. In severe cases of nursing bottle syndrome, very young children must undergo extensive dental treatment, often requiring a general anaesthetic.²

This study was undertaken to determine the prevalence of nursing bottle syndrome in a non-fluoridated city, and to investigate the possible etiology.



Figure 1. Caries initiation on lingual surfaces of incisors.

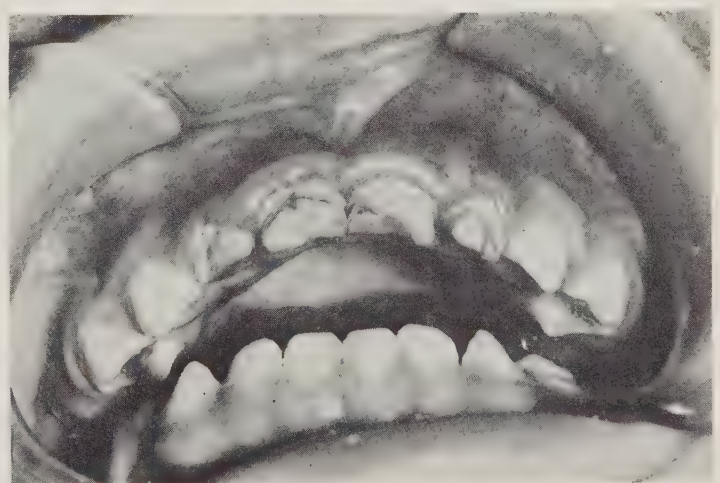


Figure 2. Rapid carious destruction of incisors and first molars which follows the sequence of eruption. Note that the lower incisors are not affected.

METHODS AND MATERIALS

The subjects for the study were randomly selected from children attending public health clinics and community centre activities. All the children were between nine months and six years of age.

An interview was developed to attain information related to demographic data, socio-economic status, perinatal health of the child, dental history, feeding practices, and nutritional considerations.

One of the investigators (P.P.) interviewed the parent of each child in the study. Following the interview, the child's teeth were examined using a portable light source, to determine whether or not the child had nursing bottle syndrome. The criteria used in the diagnosis was the presence of smooth surface caries on the labial and lingual surfaces of the maxillary incisors.

All positive cases were confirmed by the second investigator (G.D.) and the teeth were photographed, where possible.

TABLE I

Prevalence of Nursing Bottle Syndrome

Number of subjects	594
Number of nursing bottle syndrome	19
Prevalence	3.2%

TABLE II

Demographic Data

	Non-NBS		NBS	
	mean	range	mean	range
Age of child (months)	30	9-71	34	15-60
Age of father (at birth of child)	28	16-54	23	24-48
Education of father	13	4-31	9	8-19
Age of mother (at birth of child)	27	16-45	24	18-36
Education of mother	13	5-20	11	7-16

Statistical comparison of the data of the children with and without nursing bottle syndrome was carried out using factor analysis.

RESULTS

As can be seen in Table I, 594 children were examined and of these 19 had nursing bottle syndrome. The prevalence of nursing bottle syndrome in this study therefore is 3.2 per cent. The demographic findings indicate a trend for

TABLE III
Birth History

	Non-NBS		NBS	
Problems in Pregnancy	7.7%		5.3%	
Prematurity	6.1%		0%	
Problems in delivery	9.6%		10.5%	
Postnatal complications	5.9%		5.6%	
Illness in first 2 years	12.0%		21.1%	
	mean	range	mean	range
Birthweight (gm)	3373	1107-5221	3555	2270-4739

TABLE IV
Dental History

	Non-NBS		NBS	
	mean	range	mean	range
Age of eruption of upper incisors	8.0	3-15	6.4	2-12
Frequency of toothbrushing by parent	occasionally		occasionally	
Frequency of toothbrushing by child	never-occasionally		never-occasionally	
Age of initiation of toothbrushing	1-2 yr. old		1-2 yr. old	
Age at time of first dental visit	3-4 yr. old		3 yr. old	

the parents of children with nursing bottle syndrome to be younger and have fewer years of formal schooling, Table II. The comparison of the variables in birth history indicate that the two groups are quite similar except in the area of infant illness, where there is a trend for the NBS group to have experienced illness during infancy more frequently, Table III. The dental histories of the two groups were quite similar with a slight trend for the NBS group to have their incisors erupt earlier, Table IV.

The data for bottle feeding indicates a tendency for the NBS group to have had the bottle ad libitum more frequently than the non-NBS group, Table V. The habit of

taking the bottle at every nap and night time is more frequent in the NBS group. Forty per cent of the non-NBS group never had a bottle at night or nap time as compared with 10 per cent for the NBS group. The frequency of keeping the nipple of the bottle in the mouth all night was greater in the children with NBS than without NBS. As well, using the bottle for prolonged periods of time during the day occurs more frequently in the NBS group.

The average number of hours spent with access to the bottle was 8.3 hours for the NBS group and 2.2 hours for the non-NBS group. However, 30 children without NBS had prolonged access to the bottle of over eight hours per

TABLE V Bottle Feeding				
	Non-NBS		NBS	
Bottle feeding habits:				
on schedule	41.2%		36.8%	
ad lib	43.8%		63.2%	
no bottle feeding	15.0%		0%	
Frequency of bedtime bottle:				
every nap & night	40.2%		57.9%	
every nap	0.6%		0%	
every night	13.4%		21.1%	
4-5 x/ week	1.0%		5.3%	
occasionally	5.3%		5.3%	
never	36.6%		10.5%	
Nipple in mouth all night:				
yes	10.7%		47.1%	
no	86.9%		52.9%	
Prolonged daytime bottle				
Yes	20.2%		55.6%	
no	79.6%		44.4%	
	mean	range	mean	range
Frequency of bottle feeding at 9 months (times/ day)	4.4	1-23	4.2	1-10
Total hours spent with bottle at 9 months	2.2	0.5-24	8.3	0.5-24
Age at time of weaning	17.7	2.0-48.0	21.4	11.0-35.0

TABLE VI Breast Feeding				
	Non-NBS		NBS	
Percentage of babies breast fed	73%		74%	
Bottle supplementation of breast feeding	31%		21%	
Feeding method after weaning:				
bottle	79%		85.7%	
cup	15%		7.1%	
bottle and cup	6%		7.1%	
Breast feeding habits				
schedule	12.5%		7.1%	
ad lib	87.5%		92.9%	
Prolonged breast feeding at 6 months age				
night	5.7%		21.1%	
day	2.3%		0%	
night & day	4.3%		5.3%	
neither	87.7%		73.7%	
	mean	range	mean	range
Hours of breast feeding at 6 months	2.2	1-14	1.6	1-2
Age of weaning from breast feeding	7.0	1-32	7.9	1-36

day. There is a tendency also for the NBS group to have been weaned from the bottle when they are older. The data on breast feeding shows little difference between the two groups with the exception that the NBS group was fed at night time at a greater frequency than the non-NBS group, Table VI.

The data for the other nutritional components of an infant's diet indicates that fluoride supplementation of the diet was followed in a more conscientious manner more frequently in the non-NBS group, Table VII. Twenty-five per cent of the study population used a pacifier and of these only 27 were given a sweetener on it, for a prevalence of 4.5 per cent. Seven children with NBS had sweetened pacifiers. Factor analysis of the variables which did show differences between the NBS group and the non-NBS group indicated that NBS may be associated with socioeconomic status, total number of hours spent with the nursing bottle during the day, and fluoride supplementation.

DISCUSSION

The clinical impression of pedodontists in the Vancouver area indicates an increase in the number of children with Nursing Bottle Syndrome. However the prevalence of 3.2 per cent in this study is substantially lower when compared with other prevalence studies.³⁻⁸ Table VIII. A possible explanation is that the present study may be biased towards an under-estimation of the population prevalence. This could have occurred because of the method of sampling used in this study. That is, in order to be included in the study the parent had to be in attendance at either a public health clinic or recreation facility. However, it is possible that this finding is in keeping with the 50 per cent reduction in the DMFS of school children recently observed in this region.⁹

The relationship of nursing bottle syndrome to specific etiologic factors was not conclusive. The use of a nursing bottle as a pacifier seems to be at the root of the problem. However, the finding that almost 40 percent of the children who didn't have the syndrome always had a bottle at nap and bed time and 30 children who didn't have the syndrome had access to the bottle for more than eight hours per day, indicates that there may be other factors which predispose to the nursing bottle syndrome.

Studies by other investigators to isolate specific etiologic agents which cause NBS have not been able to show a direct relationship with NBS, indicating that it is of multifactorial etiology.¹⁰⁻¹⁷

Published reports of nursing bottle syndrome caused by breast feeding have appeared in the recent dental literature.^{18, 19} One of the children in this study with nursing bottle syndrome had been only breast fed. This is in conflict with another report where no NBS caries was associated with breast feeding.²⁰ In the present study the his-

TABLE VII
Nutritional Considerations

	Non-NBS	NBS
First solid food:		
cereal	67.1%	52.6%
cereal with fruit or sugar	11.5%	10.5%
yogurt	0.9%	10.5%
vegetables	5.2%	0%
fruit	12.3%	15.8%
other	3.0%	10.5%
Fluoride supplementation		
1-2 times/week	4.5%	31.6%
3-5 times/week	12.7%	5.3%
5-7 times/week	60.9%	36.8%
never	21.9%	26.3%
Vitamin supplementation		
1-3 times/week	4.2%	21.1%
3-5 times/week	6.8%	10.5%
5-7 times/week	51.1%	47.4%
occasionally	0.2%	0.0%
never	37.7%	21.1%

TABLE VIII
Nursing Bottle Syndrome Prevalence Studies

Beltrami	France	1939	2.5%
Goose	Britain	1967	6.8%
Goose	Britain	1968	5.9%
Winter	Britain	1971	5.2%
Currier	USA	1977	4.9%
Cleaton-Jones	S. Africa	1978	13.7% Rural 3.1% Urban
Present Study	Canada	1981	3.2%

tory of breast feeding was similar to that of the case reports; that is the infant was breast-fed ad lib, slept with the mother, and was not weaned until three years of age. Notwithstanding, the arguments of some that breast-fed infants cannot get NBS,²¹ it seems apparent that it is possible and mothers should be counselled accordingly. Furthermore, these findings suggest a name change — to nursing caries syndrome perhaps?

A comparison of the prevalence of the use of pacifiers shows that they were used with slightly greater frequency in the present study population (25 per cent) than in the

studies reported by Goose and Gittus 1967 and 1968, where a prevalence of 21 per cent and 9.4 per cent was reported respectively. The prevalence of usage of a sweetened pacifier was similar, 4.5 per cent in this study, as compared to 5 per cent in the 1967 report of Goose.⁴

The key to the problem of nursing caries syndrome is preventing it. As always, education is what is required. Many articles have been written with the specific intent of making the health professional aware of the problem.^{1, 22-25} Perhaps what is required is a re-evaluation of the health-related professional school curriculums, particularly in the medical and nursing areas, to ensure that dentistry, and in particular preventive dentistry, is adequately taught. Perhaps then we will see a reduction in the caries problem in young children known as nursing bottle syndrome.

The foregoing presentation was made at the 4th annual Canadian Congress of Dentistry for Children in June, 1981 in Toronto, and Dr. Derkson was the first recipient of the Research Award, from the Congress.

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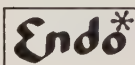
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Complete prescribing information available on request.

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Normalization of dental care for handicapped patients in a medium-sized Canadian city: a team approach

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ABSTRACT

A dental program was established in the Kitchener-Waterloo area of Ontario to meet the special needs of multiply-handicapped children and young adults in an institution (Sunbeam Home) and in the community. The Staff of Sunbeam Home were taught to give dental care under the supervision of a registered nurse. A hygienist visits the Home regularly to do scaling and give oral prophylaxis. The dentist sees every child once a year to establish treatment priorities and attempts to treat patients in his private office. If the patient is not co-operative or the restoration is too extensive, the child is admitted to a local general hospital for dental surgery. In two years, 37 patients (aged 2 to 26 years) have undergone such surgery. It is now possible to see the benefits of the preventive measures in many children, in terms of reduction of dental problems and personal well-being.

INTRODUCTION

A dentist has a great opportunity to use his or her training, imagination and empathy to the fullest in providing dentistry for the physically and mentally handicapped, who are part of every community in our province.

Handicapped patients require special attention to prevent dental disease since many of them have difficulty maintaining good oral hygiene.¹ However, in the past,

dental care for the handicapped has often been lacking. In a study in London, England,² lack of co-operation by the parents was seen as the most common difficulty in obtaining dental treatment. Parents may "neglect dentistry in their mentally retarded children because they have so many other difficulties relating to them."³ Some parents are embarrassed if their retarded child creates a scene in the dental office. Further, since many retarded children also have physical handicaps, transportation to the dental office presents a major problem. At the same time many dentists have felt unprepared to accept the handicapped as patients and community facilities often have not made it possible to treat the handicapped locally.

Because of these problems, in the Kitchener-Waterloo area we developed a dental program for handicapped children in a residential institution and in the community. The goal of the program is to offer dentistry to these children in the same way it is provided to normal children. The program uses a team approach, co-ordinating dental care in the institution, a private dental office and a local general hospital.

DEVELOPMENT OF THE DENTAL PROGRAM

In 1974 the board of directors of Sunbeam Home in Kitchener, Ontario, requested that a dental program be established for the residents of the Home and approached the dental consultant to the Ontario Ministry of Health (GDA). Shortly afterwards, a local paedodontist (BAR)

became dental director of the Home, providing services to the residents, under local anaesthesia, at the Home and in his private office.

It was soon obvious that general anaesthesia was necessary for children requiring extensive restorations or surgery. A few patients were referred to The Hospital for Sick Children, Toronto, which is 100 km from the Home, but this process was cumbersome and inefficient since it occupied staff from the Home (one per patient) as well as the Home's van and its driver for at least one full day.

By 1979, the International Year of the Child, better arrangements were possible. The Regional Dental Health Officer appointed a dental hygienist to go to the Sunbeam Home one-half day a week to perform dental surveys, and provide prophylaxis and treatment. This relieved the dental director of these routine tasks. In the meantime, the dental director and administrator of Sunbeam Home (PAH) approached a local general hospital (St. Mary's General Hospital) with a proposal to establish a dental unit for these patients in one operating room. The administrator of the Home arranged a meeting between the dental director and the hospital staff who would be most affected by these admissions: the administrator, head of anaesthesia, head nurses of the operating and recovery rooms, a representative from the nursing office and the booking clerk. The special needs of the patients and the ways in which we planned to meet them were discussed.

Once the representatives of the hospital were satisfied that the admission and surgery could be accomplished without excessive pressure on their resources, they accepted our proposal and set aside block time (use of an operating room for a specific period at a regular interval).

The operating room (OR) was modified for dental surgery but can be quickly made into a general OR. A portable dental unit (Adec Micro-Cart, Model 2403) with water and air lines and an umbilical cord is attached to a control box at the wall. A portable Phillips Oralix 65 dental roentgenography unit (Type 9801 100 30604)* was contributed by Sunbeam Home. An automatic amalgam mixer is also available.

Another important improvement in the program came when one of the registered nurses at the Home took a special interest in maintaining and promoting the daily routine of dental care (nurse in charge of the dental program). She also carries out monthly spot checks on each child.

The costs of the program are shared by the Home, the dentist and the Hospital.

SUNBEAM HOME

Sunbeam Home is operated under the guidelines of the Ontario Ministry of Community and Social Services. It has a voluntary board of directors from the community

and an administrator. Operating expenses are met by the provincial government and capital expenditures are shared by the government and community contributions. The Home has 100 to 126 severely retarded and multiply-handicapped residents, ranging in age from infants to young adults. Sunbeam Home constantly promotes positive health programs that enable each child to enjoy the greatest possible development.

Staff Training

The dental program was introduced by holding seminars for the direct care staff in the Home. The dental director talked about the theory behind, and philosophy of, the program. His dental assistant showed the staff how to brush and floss their own teeth correctly and the hygienist supervised a brush-in and floss-in. We believed that if staff were made aware of their own dental needs they would be more attentive to the needs of the children.

The nurse in charge of the dental program has developed ingenious and enthusiastic programs to maintain staff interest in oral hygiene. Similar seminars are held three or four times a year, accompanied by poster and audiovisual displays and in-house competitions to reinforce teaching. The dentist also compliments staff and answers their questions during his annual survey.

New staff are shown a videotape of the introductory seminar. Also, during orientation, the hygienist stresses the importance of dental care and teaches oral hygiene techniques.

Annual Dental Survey

Each year the dental director surveys all patients at the Home to establish priority lists for dental surgery and periodontal treatment. Each patient's dental problems are rated on a scale from zero to five and then the patients are listed in order of the urgency of their problems. Referrals for surgery are made to the private office and appointments for periodontal treatment are arranged at the Home. Severe cases are referred directly to a community periodontist.

Some new residents arrive at Sunbeam Home with a full dental evaluation and can be fitted into the priority lists in the appropriate places. Others must first be seen by the hygienist, who makes a preliminary evaluation. If work appears necessary the hygienist refers the child to the dental office for full diagnosis.

Oral Hygiene

All residents brush their teeth or have them brushed after each meal. Toothpaste is used only for children who can rinse their mouths and expectorate the toothpaste and water. Otherwise, only water and good brushing technique are used. Several residents who lack manual dexterity but are being taught independent living skills have electric toothbrushes. The staff checks any child who brushes his own teeth to ensure that plaque does not build up.

*Phillips Oralix 65 Dens-o-mat. 110 V. 7.5 ma, output 65 KVP, 60 Mz, 9.8 A.



Fig. 1. The driver of the Home's van, loading patients into the van to go to the dentist's office.

The hygienist does scaling and gives oral prophylaxis on her weekly visits, according to the priority lists established by the dentist. Staff can also ask her about dental care for special patients during her weekly visits and she helps them establish special procedures to deal with problems. Referrals to the hygienist are also made by notifying the dental director. If problems are noted at the residents' annual case conference, the children are referred to the dental director.

THE COMMUNITY

As well as more than 100 residents, Sunbeam Home has a revolving population of 70 children who live with their families but come to the Home occasionally on the Parent Relief Program. This program allows parents who have chosen to keep their handicapped children at home to have holidays away from them.

While these children are in Sunbeam Home they are fitted into the hygienist's schedule and assessed by the dentist.

TRANSPORTATION OF RESIDENTS FOR MORE SPECIALIZED CARE

An important requirement for success in this program is special transportation for the patients. Sunbeam Home uses a special van equipped with a wheelchair elevator donated by People Who Care (an informal community group) (Fig. 1). Each patient being transported is accompanied by one staff member.

THE PRIVATE DENTAL OFFICE

The only way to truly evaluate a handicapped person's ability to cope with dental treatment is to attempt the treatment. We usually intersperse patients from Sunbeam Home between normal patients in the practice; everyone is seen in one open-concept office.

The desensitization technique modified by Addelston⁴ and described by Barenie and Ripa⁵ is applied. The dentist tells the patient what he is going to do and then shows



Fig. 2. Two children from the Home and one normal child in the dentist's open-concept office.

him the procedure. Finally, he attempts the activity. The first step is to examine the child in the dental chair or wheelchair, with a mirror or probe (Fig. 2). If this task is accomplished, more difficult procedures are attempted to evaluate the patient and encourage appropriate responses to treatment.

Patients are rated as co-operative, fidgety but co-operative, actively unco-operative or violently unco-operative.⁶ The behaviour profile is evaluated three times during the appointment.

A patient who cannot handle the simplest procedures is considered for general anaesthesia. This decision also depends on the extent of the dental work and the risk for the patient in undergoing the general anaesthetic, as determined by the attending physician.

REFERRAL TO THE HOSPITAL

Booking Procedure

The dentist establishes the treatment plan and lets his receptionist know how much OR time will be needed. She sends letters to the administrator of the Home and the child's physician, who arranges for the usual preoperative tests, and telephones the booking clerk. The receptionist also ensures that the hospital receives a complete medical history and confirms that all the necessary tests have been done before the admission.

Materials, Instruments and OR Staff

As far as possible, materials and instruments are provided by the dentist from his office. Before the surgery, the dental assistant sets up trays and prepares the materials (e.g., punches rubber dams and sterilizes tray holders) in the office.

In the OR, the anaesthetist and OR nurse are responsible for the patient's well-being during the general anaesthesia. A dental nurse, previously approved by the hospital, assists the dentist. After anaesthesia and intubation with a nasal tube, the throat is packed and the patient is draped with a lead sheet while a full set of dental roentgenographs

is taken (Fig. 3). The x-ray films are developed immediately and the dentist examines them and adjusts the treatment plan accordingly. Teeth with incipient caries are also restored to avoid repeating general anaesthesia more often than necessary (Fig. 4).

After the dental procedures are complete, the OR assistant records the actual treatment given on the patient's chart and compares it with what was planned. The dentist indicates a complete summary of the work, including all techniques. The dental nurse takes the instruments and materials back to the office for sterilization and repacking for the next use.

RESULTS

The direct care staff have become conscious of the importance of dental health. The results of the monthly checks improved markedly at first; now that the most urgent problems have been dealt with the spot check results vary as new patients are admitted and new problems become apparent. Many children living in the community now have access to dental care for the first time.

The behaviour profile in the office is usually constant, that is, most patients are co-operative or unco-operative throughout the appointment. The next most common profile is progressive, that is, patients behave better as

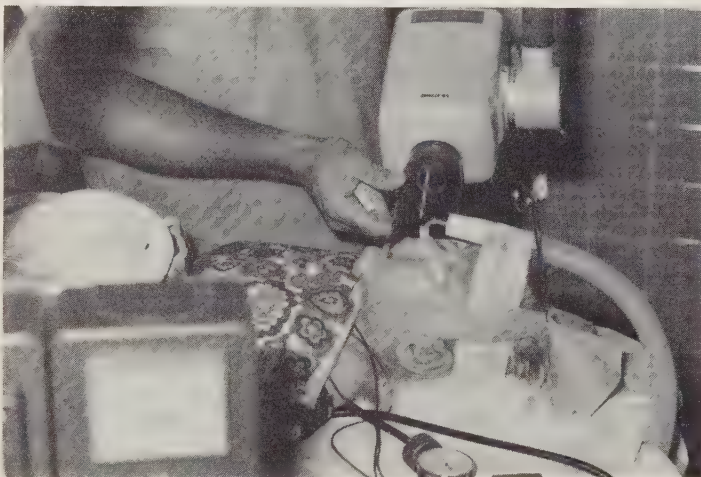


Fig. 3. Oral roentgenographs being taken in the OR after the child has been anaesthetized.



Fig. 4. General anaesthesia is utilized for full mouth treatment.

the appointment goes on. Regressive (getting progressively worse) and peak (unresponsive except for one outburst) profiles are uncommon.

In two years, we have operated on 37 patients (aged 2 to 26 years) at St. Mary's General Hospital. Of these, 23 live in the Home and 14 in the community. In about half the cases (19), the general anaesthesia was 1½ to 2½ hours. Four patients had shorter procedures (less than 90 minutes) and the remainder (14) were anaesthetized for more than 2½ hours.

DISCUSSION

In 1971 approximately 210,000 handicapped people lived and worked in Ontario. According to the Province of Ontario Task Force on Dental Care for the Mentally Retarded (1972), they "require a program in preventive dentistry even more than individuals of normal intelligence because of the difficulty experienced in providing some of them with dental treatment and the inability of others to learn to use dentures."⁷

Arranging dental services for the handicapped who live in an institution requires the goodwill and co-operation of a number of staff in the Home, the dentist's office and the hospital, as well as assistance from government and the community. Actually providing prophylaxis or treatment in the Home or office can be awkward. An unco-operative, handicapped person can turn a simple dental procedure into a prolonged and difficult operation.³ However, it is possible to train the handicapped to improve dental hygiene. In a study of severely retarded children, Albino et al¹ showed that intensive, small group instruction in preventive concepts, offered in a five-week program, decreased plaque-scores significantly below the level of those of the control group. We have found ways of handling the difficulties in our program and hope that by concentrating on prevention we will decrease our problems as well as increase the quality of life for these children.

In the private practice we find the open-concept office and the integration of handicapped and normal patients helpful. The children can see each other in different phases of therapy. Because of modelling, behaviour in handicapped (and normal) patients that might otherwise be difficult, is ameliorated.

Initially, a small general hospital may be reluctant to admit a handicapped child for surgery.⁸ There may be few staff who are familiar with the problems presented by the child's physical or mental handicaps or too few paediatric nurses available to provide the extra care that is usually necessary. Such children commonly have chronic, recurring upper respiratory infections or spasticity that prevents full expansion of the chest.

In many cases the children are on medications that limit the choice of anaesthesia. Furthermore, many of them are small for their ages so anaesthesia doses have to be calculated by weight with a 10 per cent adjustment for age. The hospital nursing staff must provide special care in the re-

covery room, since the child's medications and the anaesthesia may potentiate each other.

On the other hand, none of these problems are insurmountable. By noting each one and discussing it with the appropriate staff we were able to reduce the difficulties to manageable levels. In fact, since we began operating, the hospital has not reported any undue strain on their facilities or unexpected complications.

One reason our surgery is relatively uncomplicated is that the dentist provides his own handpieces. In hospitals where dental equipment is used infrequently, it often does not work well when it is needed. Since the maintenance is done regularly at the dentist's office our equipment is reliable.

Our program is directed mainly towards children in an institution. However, the handicapped living in the community also need dental care. Furthermore, more handicapped people are remaining in the community now than in the past. With the implementation of the Williston Report³ the number of handicapped living in government institutions has decreased during the past decade by more than 50 per cent (unpublished date).

Handicapped children living in the community have more dental disease than similarly handicapped children in institutions. A study comparing the incidence of dental caries in mentally retarded inpatients and outpatients at the Hathorne Regional Center in Massachusetts⁹ found that in the 16- to 30-year-old age group, the incidence was almost twice as great in the outpatients' group, at least partly because the diet of the inpatients was carefully controlled. A higher caries rate has been found in children with Down's syndrome who live in the community than in those living in institutions¹⁰ and fed a low cariogenic diet.¹¹

Mentally retarded children living in the community also have a higher rate of tooth decay than normal children. In a sample of 201 mentally retarded children living in Portland, Oregon, 55 per cent had active caries and the DMF rate was higher than in a normal population.¹² Levine et al found that the DMF of the handicapped patients treated in the dental clinic at Mount Sinai Hospital in Toronto was much higher than in the normal patients in the same community.¹³

Similar dental programs would be useful for the growing population of the elderly, both in institutions and in the community. Good dental care can help ensure a healthier and more independent lifestyle for handicapped and normal people of all ages.

SUMMARY

Successful dental treatment of the handicapped requires a team approach. This permits efficient use of facilities while providing effective service. In Kitchener-Waterloo, the integration of services of the general hospital, a private practitioner and an institution has been well co-ordinated to achieve this end.

The dental program in the Sunbeam Home works smoothly, largely because of the efforts of an interested registered nurse, who is responsible for the daily program, and the hygienist provided by the Regional Dental Health Officer. The nurse sees that preventive care is administered every day and that all acute problems are brought to the attention of the hygienist or dentist. Her efforts constantly remind staff, ensure that monthly checks of all children take place and maintain a competitive spirit between wards.

The hygienist complements and reinforces the efforts of the nurse. The annual survey by the dental director measures the effectiveness of the program and priority ranking ensures that the most severe dental problems are treated first.

The private dental office is an integral part of this service. It allows the handicapped patient an opportunity to receive dental service in a normal manner. However, if a patient cannot cope with this, good dentistry is available through the hospital.

Providing the most normal lifestyle that is possible for each handicapped person is part of the philosophy of care in Ontario. As well as being efficient, the team approach allows the handicapped person to experience this normality in dental care.

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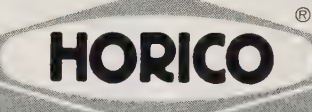
Mrs. Henderson is the Administrator of the Sunbeam Home.

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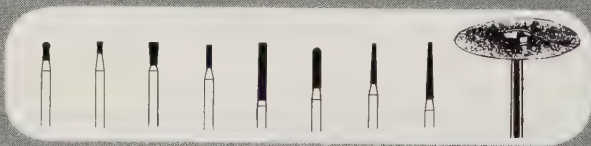
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Fluoride varnishes as cariostatic agents: a review

Lawrence Yanover, DDS
Toronto

ABSTRACT

Fluoride varnishes developed from a desire to maximize the exposure time of fluoride on enamel for improved caries protection. Two marketed formulations have proven clinically acceptable as cariostatic agents. Future research may discover improved products.

INTRODUCTION

The purpose of this paper is to review and evaluate the effectiveness of fluoride varnishes as cariostatic agents. The development of fluoride varnishes is outlined, showing how they arose from earlier theoretical work on topical fluoride cariosis. Results from extensive testing of the fluoride varnishes are then summarized, followed by a discussion of the relative merits of these products with respect to other professionally applied topical fluoride agents.

DEVELOPMENT OF FLUORIDE VARNISHES

Traditional professionally applied topical fluoride treatments, for practical reasons, utilize high fluoride concentrations to deposit considerable amounts of fluoride in short periods of time. This fluoride is often deposited initially as a surface layer of the more soluble calcium fluoride instead of the preferred, more protective, fluorapatite. It was felt that providing a barrier to allow fluoride extended contact with the enamel could enhance the three known mechanisms of fluoride cariosis, namely, reduced enamel solubility, remineralization and antimicrobial activity.^{1,2} Calcium fluoride would be held in place to hopefully convert to fluorapatite. Remineralizing enamel would have a ready supply of fluoride to incorporate into its structure. Antimicrobial concentrations of fluoride could be exposed to plaque for extended times.

It was in this light that a barrier coating study was carried out, whereby topically fluoridated teeth were coated with a mixture of shellac, polyvinyl pyrrolidone vinylace-

tate and nonylphenol in a 20% solution of ethanol.² The study reported that the amount of stable acquired fluoride depended on the length of time the coating remained on the enamel. Similar results were obtained with the application of cyanoacrylate based sealants after fluoride treatment.³ These findings were supported by evidence gained from *in vitro* experiments with topical fluoride showing that delayed washing of the teeth following application led to greater fluoride retention in enamel.⁴

The preceding observations led to the commercial development of two widely available fluoride varnishes to be used as professionally applied topical fluoride treatments. They supposedly provide rapid application and extended exposure of the fluoride. One of them, Duraphat, is a fluoride varnish yielding 2.26% F⁻ from a suspension of sodium fluoride in an alcoholic solution of natural varnish substances. Fluor Protector, the other varnish, yields 0.7% F⁻ from a fluorosilane compound in a liquid polyurethane lacquer.

REVIEW OF LITERATURE

Extensive clinical trials have demonstrated that fluoride varnishes are effective topical fluorides (**Table 1**). These agents will reduce caries in deciduous teeth⁵ and do it more effectively in the primary rather than mixed dentition.⁶ Such results might be due to a more reactive enamel⁷ in the younger primary teeth which more readily interacts with fluoride, or a greater number of more caries-prone contact points in the older children with erupted first permanent molars. Other explanations are that more worn primary molar occlusal tables were not as able to hold the varnish as a sealant,^{8,9} or possibly an artifact of a half-mouth technique, whereby some of the applied fluoride affected the control side. The last supposition bears consideration since the only studies to show no significant caries-reducing potential in a varnish used a half-mouth technique.^{6,10-12}

The varnishes also reduce caries in the permanent teeth. Again, they seem most effective on newly erupted teeth,^{6,13,14} a phenomenon commonly reported with other topical fluorides.¹⁵ Their ability to prevent occlusal decay,⁸ a frequent form of destruction seen soon after eruption, is a benefit not routinely found in other topical fluoride regimes.¹⁵ This property may be related to a simple physical sealing of the retentive occlusal surface, similar in nature to occlusal sealants^{9,16} or an anti-bacterial action upon the organisms trapped in occlusal fissures.¹⁷

Also, a physico-chemical effect upon the occlusal enamel, mediated by an extended period of enamel-varnish interaction in the fissure, may be present.

Duraphat and Fluor Protector leave a high concentration of fluoride ion in the outer enamel of both deciduous¹⁸ and permanent teeth^{8,19,20} even greater than that arising from topical APF application,¹⁴ with Fluor Protector providing the highest levels.⁴ This in itself is not important since there is no simple relationship between enamel fluoride deposition and dental caries; the mode of incorporation of fluoride and its distribution in the enamel are important co-determinants.⁷ Thus, it is relevant to note that no CaF₂ was found in treated enamel one week after application.²¹ Whether or not it simply dissolved in oral fluids during the first week may not be critical, since other agents known to produce some CaF have shown significant clinical results as caries preventive agents.^{7,22} Considering the stability of fluoride from varnish after one week and depth of penetration,⁸ the anti-cariogenic potential of varnishes, as noted previously, is understandable.

It is possible that such cariostatic action of the varnish can be improved by increasing the varnish-enamel contact time through application of the varnish in the afternoon and requesting patients to eat only a light meal afterwards and refrain from brushing for 24 hours.¹⁴ It would also seem practical, noting a loss of fluoride over six months,²³ to repeat applications semi-annually, as is the accepted practice with other topical fluoride agents.²⁴

Varnishes seem to be the quickest and easiest of all topical fluorides to apply.¹⁷ Clinical studies report application times for the agent at five minutes for a traditional application format, including prophylaxis, flossing, isolation and drying of teeth, followed by application.²⁵ Others report an average of 30²⁶ to 35¹³ children treated per hour when the subjects were requested to clean their own teeth before treatment. This could prove to be an extremely cost-effective procedure when following such a protocol, especially when noting that caries protection was not affected by such a practice, an observation noted in a project with a similar protocol using other forms of topical fluoride.²⁷

Acceptance of the varnish seems widespread among the children who receive it⁶ although the taste is occasionally unacceptable. Practitioners have found the technique excellent for selected patients such as children who gag on fluoride trays. Such patients find a simple painting of teeth more innocuous. Those delivering dental care to patients under general anaesthetic also find this technique simple,

Table 1
Clinical Studies of Fluoride Varnish

Length of study (yr.)	Applications per year	Dentition examined	Age of subjects (yr.)	% rel'n	Comments	Study
3	2	2°	9.5 10.5	18.0 43.0	Duraphat	13
2	2	1°	3.0	44.0	Duraphat	15
2	2	1°	5.0	7.4 (insig)	Duraphat	24
		2°	5.0	36.6	Half mouth technique	
2	2	2°	10.0-12.0	50.0	Duraphat	33
2	1	2°	11.0	none	Duraphat	22
	3	2°	11.0	45.0		
2	2	2°	11.0-13.0	12.0 (insig) 24.0	Fluor Protector Duraphat Both half mouth technique	29
2	2	2°	12.8	none	Fluor Protector prevention counselling Half mouth technique	18,19
2	2	2°	13.0-14.0	42.5	Duraphat	14
1	1	2°	15.0	75.0	Duraphat and F- rinse	17
.5-1.5	unspecified	unspecified	"children"	37.5-46.1	Experimental varnish formula	20

providing a topical fluoride treatment which does not compromise the airway.

The safety of the product does not seem in doubt. In a study involving four children aged 4, 5, 12 and 14, blood and urine levels of fluoride were assessed at selected times following Duraphat application. It was felt no adverse side effects occurred with respect to renal function and that plasma levels were far below those considered toxic.²⁸

SUMMARY

Fluoride varnishes are simple, effective, professionally-applied topical anticaries agents which have proven themselves in repeated clinical trials. This anticaries activity works in addition to that provided by oral hygiene instruction,²⁹ frequent self-administered topical fluoride applications²⁵ or optimal exposure to systemic fluoride.¹²

When applied to populations similar to those in previous studies, results should be significant. Previous caution that further research was necessary before effectiveness could be determined and endorsement given,³⁰ is no longer valid.

Further study of these products must continue, especially on urban North American populations exposed since birth to systemic fluoride. Present professionally-applied topical agents do not provide enough anticariogenic potential to rate universal recommendation on such a population²⁴ and it is possible that these agents, with their combined actions as sealant and fluoride, could prove more effective.^{3,25} As well, study of biologic effects of the barrier agents, not just the fluoride, should be initiated since they present unknown risks.

The concept of a barrier agent with fluoride treatment is biologically sound. The present agents seem to take advantage of this concept to some degree. Improvements in such agents are sure to come if the demand for effective preventive therapy continues unabated. Even now, new materials have been patented as fluoride "coatings"³¹ including fluoro-substituted purines, fluoroalkoxylalkyl 2-cyanoacrylates and fluoride containing polyurethane adhesives. Assessment of such agents will bear future investigation and undoubtedly improve upon the present formulations, but until then, Duraphat and Fluor Protector can be used with confidence where indicated.

Dr. Yanover is presently enrolled as a graduate student at the Faculty of Dentistry, University of Toronto.

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Faculty of Dentistry
Dalhousie University
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Announcements

CANADA

CDA BOARD OF GOVERNORS MEETING

The Annual Meeting of the Board of Governors of the Canadian Dental Association will be held on September 24-25, 1982, at the Four Seasons Hotel, Ottawa, commencing at 9:00 a.m., on September 24th.

ASSEMBLÉE DU CONSEIL D'ADMINISTRATION

L'assemblée annuelle du Conseil d'administration de l'ADC pour 1982, aura lieu les 24 et 25 septembre, 1982, à l'hôtel Four Seasons à Ottawa. L'assemblée commencera à 9 heures le 24 septembre.

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Advertising in the Journal of the Canadian Dental Association are accepted on the basis of the Association's Standards on Advertising. Product claims are based on adequate evidence acceptable to the Association and are in keeping with highest professional ethics.

June/juin

73rd Annual Conference of the Canadian Public Health Association, Explorer Hotel, Yellowknife, Northwest Territories, June 21-24, 1982. For further details contact: Dr. David Martin, Chairman, Scientific Program Committee, c/o Canadian Public Health Association, 1335 Carling Ave., Suite 210, Ottawa, Ont. K1Z 8N8. Phone: (613) 725-3769.

Canadian Paediatric Society Annual Meeting, Holiday Inn, City Centre and Tower, London, Ontario, June 26-30, 1982. Contact: Canadian Paediatric Society, Sherbrooke, Ont. J1H 5N4.

July/juillet

The Sixth Congress of the International Association of Dentistry for the Handicapped, Harbour Castle Hilton Hotel, Toronto, Ontario, July 20-25, 1982. Contact: The Programme Chairman, Sixth Congress I.A.D.H., Dept. of Paedodontics, Faculty of Dentistry, University of

Toronto, 124 Edward St., Toronto, Ont. M5G 1G6.

The Pan-Pacific International Symposium on Biomaterials, University of British Columbia, Vancouver, British Columbia, July 28-30, 1982. Contact: Dr. R.H. Roydhouse, Secretariat Biomaterials '82, 1704, 1200 Alberni St., Vancouver, B.C. V6E 1A6.

August/août

Second International Congress on Hospital Dental Practice, Four Seasons Hotel, Toronto, Ontario, August 26-29, 1982. Contact: Dr. C.O. Munro, Programme Chairman, 2nd International Congress on Hospital Dental Practice, 124 Edward Street, Toronto, Ont. M5G 1G6.

October/octobre

Canadian Association of Oral and Maxillofacial Surgeons 1982 Scientific Session: Pre-Intra and Post-Operative Management of the Major and Maxillofacial

Surgery Patient, Four Seasons Hotel, Toronto, Ontario, October 15-17, 1982. Contact: Dr. David M. Slavkin, Co-chairman, 1920 Weston Rd., Suite 209, Weston, Ont. M9N 1W4.

The Fourth Biennial Symposium on Occlusal Studies, Hyatt Regency Hotel, Vancouver, British Columbia, October 17-20, 1982. Contact: The Society for Occlusal Studies, 1729 South Douglass Road, Anaheim, California 92806, U.S.A. or The Director, Division of Continuing Dental Education, 2199 Westbrook Mall, U.B.C., Vancouver, B.C. V6T 1Z7.

The Annual Meeting of the Canadian Academy of Endodontics, Four Seasons Hotel, Montreal, Quebec, October 22-24, 1982. Contact: Dr. Herb Borsuk, 4141 Sherbrooke St. W., Suite 515 Westmount, Que. H3Z 1B8. Phone: (514) 933-8424.

December/décembre

The Toronto Academy of Dentistry Annual Winter Clinic, Royal York Hotel, Toronto, Ontario, December 6, 1982. Contact: Academy of Dentistry, 234 St. George St., Toronto, Ont. M5R 2P2.

Announcements

Phone: (416) 967-5649. PLEASE NOTE CHANGE OF DAY AND DATE FROM PREVIOUS YEARS.

Conference on Medical Device Technology in the 80's, Harbour Castle Hotel, Toronto, Ontario, December 6-8, 1982. Contact: Canadian Association of Manufacturers of Medical Devices, 480 Garyray Drive, Weston, Ont. M9L 1P8. Phone: (416) 745-9210.

International

July/juillet

Cours International sur la microchirurgie en médecine dentaire, Bordeaux, France, du 5-7 juillet 1982. C'est un cours d'initiation sur l'utilisation du microscope en dentisterie conservatrice, endodontie, prothèse fixe, périodontie. Inscription: 1600 francs. Contacté: Secrétariat du cours de microchirurgie O.S., Fondation Portmann, 114 avenue d'Arès, 33000 Bordeaux, France.

Academy of General Dentistry's 30th Annual Meeting, The Sheraton-Boston Convention Complex, Boston, Mass., July 10-14, 1982. Contact: AGD, 211 E. Chicago Ave., Suite 1200, Chicago, IL 60611, U.S.A.

The New Zealand Dental Association's 11th Biennial Conference, Rotorua, New Zealand, July 17-23, 1982. Contact: New Zealand Dental Association, 238 Remuera Road, P.O. Box 28 084, Auckland 5, New Zealand.

September/septembre

The 13th International Cancer Congress, Seattle, Washington, September 8-15, 1982. Contact: Congress Office, Suite 1800, Fourth and Blanchard Building, Seattle, WA 98121, U.S.A. Phone: (206) 621-9440.

The seminar "Tomorrow's Dentistry Today" sponsored by the Alpha Omega Foundation and the Friends of the Hebrew University, Grand Hyatt Hotel, New York City, U.S.A., September 11-12, 1982. Contact: Dr. Seymour Evans, Chairman, Alpha Omega Conference, 225 Westches-

ter Ave., Port Chester, N.Y. 10573, or call Tricia Collins (212) 840-5840.

Asociacion Argentina de Ortopedia Funcional de Los Maxilares, 25th Anniversary, Buenos Aires, Argentina, September 19-23, 1982. Contact: Dr. S.A. Gandolfo, Secretario, Asociacion Argentina de Ortopedia Funcional de Los Maxilares, Buenos Aires, Argentina.

October/octobre

Third International Dental Congress on Modern Pain Control, Tokyo, Japan, October 3-6, 1982. Contact: Third International Dental Congress on Modern Pain Control, c/o Japan Convention Services Inc., Nippon Press Center Building, 2-1, Uchisaiwai-cho 2-chome, Chiyoda-ku, Tokyo 100, Japan.

Fédération Dentaire Internationale, 70th Annual World Dental Congress, Vienna, Austria, October 11-16, 1982.

Second International Symposium on Overdentures, San Antonio, Texas, October 15-17, 1982. Contact: Dr. K.D. Rudd, Associate Dean for Continuing Dental Education, University of Texas Health Science Center at San Antonio School, 7703 Floyd Curl Dr., San Antonio, Texas 78284. Phone (512) 691-7451.

The Barbados Dental Association's 2nd Convention for The Caribbean Atlantic Regional Dental Association in conjunction with the Institute for Further Education, Barbados, W.I., December 5-8, 1982. Contact: Dr. Bernard Tuckman, 720 North Park Ave., Easton, Connecticut 06612, U.S.A.

November/novembre

International Congress of the Association Dentaire Francaise, Palais des Congres, Paris, France, November 23-27, 1982. Examining the two main aspects of professional activity — Preventive Dentistry & Therapeutic Care. Simultaneous interpretation in English, French and German will be available during the main scheduled events. Contact: Dr. Guy Roberts, Secretary-General, 92 avenue de Wagram, 75017 Paris, France.

British Dental Association — Metropolitan Branch, First International Prosthodontic Symposium, Royal Lancaster Hotel, London, England, November 25-

27, 1982. Contact: Dr. M. Seymour, Programme Co-ordinator, 22 Devonshire Place, London WIN 1PD, England.

December/décembre

The Sri Lanka Dental Association's 50th Anniversary, Colombo, December 4-6, 1982. Contact: Dr. L.S.W. Dassanayake, Chairman, Organising Committee, Sri Lanka Dental Association, Professional Centre, 275/5, Bauddhaloka Mawartha, Colombo 7, Sri Lanka.

1983+

9th Congress of Dentistry for Children, Wenworth Melbourne Hotel, Australia, February 21-24, 1983. Contact: Dr. Roger K. Hall, Royal Children's Hospital, Parkville, 3052, Victoria, Australia.

The First International Congress on Dentistry, Medical Law & Ethics, Tel Aviv, Israel, April 11-15, 1983. Contact: Dr. Shmuel Perlmutter, The International Congress on Dentistry, Medical Law & Ethics, P.O. Box 394, Tel Aviv 61003, Israel.

The Canadian Association of Oral and Maxillofacial Surgeons Meeting, Vancouver, British Columbia, June 3-6, 1983. Contact: Dr. Brian M. Abrams, Secretary, Canadian Association of Oral & Maxillofacial Surgeons, 410 - 11012 MacLeod Tr.S., Calgary, Alta. T2J 6A5.

Canadian Dental Association, 1983 National Convention, Vancouver, British Columbia, September 25-28, 1983.

Fédération Dentaire Internationale, 71st Annual World Dental Congress, Tokyo, Japan, November 14-20, 1983. Contact: Japan Dental Association, 1-20, Kudan-Kita 4-chome, Chiyoda-ku, Tokyo 102, Japan.

Canadian Dental Association, 1984 National Convention, Montreal, Quebec, April 8-12, 1984. Contact: Dr. Morton Lang, O.D.Q., 3565 Berri St., Suite 200, Montreal, Que. H2L 4G3. Phone: (514) 842-9112.

Fédération Dentaire Internationale, 72nd Annual World Dental Congress, Helsinki, Finland, August-September, 1984.

Canadian Dental Association, 1985 National Convention, Ottawa, Ontario, September 29-October 2, 1985.

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Oral Pathology

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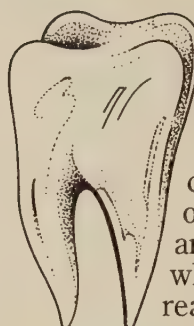
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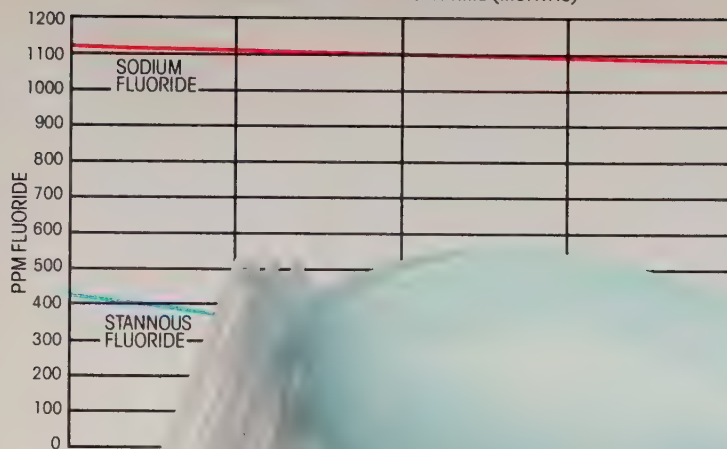
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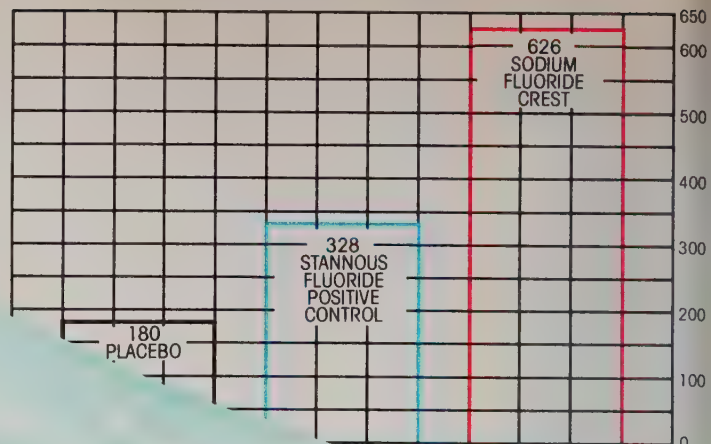
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References

1. Zacherl, W.A.: Pharm Therap Dent, 6:1-7, 1981.
2. Beiswanger, B.B., Gish, C.W., Mallatt, M.E.: Pharm Therap Dent, 6:9-16, 1981.
3. Data on file at Procter & Gamble Inc.
4. Mobley, M.J.: J Dent Res, 60 (12):1943-1948, 1981.
5. Arends, J., ten Cate, J.M.: J Cryst Gro, 53:135-147, 1981.
6. Silverstone, L.M.: Caries Res, 11 (Suppl. 1):59-84, 1977.
7. Ostrom, C.A., et al: J Dent Res, 56(3):212-221, 1977.
8. Zahradnik, R.T.: J Dent Res, 59(6):1065-1066, 1980.



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Editorial

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Letters

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Dr. Stanley Kogon feels "our national dental journal" is becoming "a glossy newsletter" rather than a scientific publication.
- 422 **Scientific study contains "flaws"**
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- Disagrees with Dr. Covit**
Dr. Peter Stevenson-Moore challenges Dr. Clyde Covit's contentions about membership in the FDI.

CDA/ODA Convention

- 427 **Convention highlights**
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- 427 **ADA presentation to CDA**
ADA President Dr. Robert Griffiths expresses thanks for co-operation of CDA and presents a silver bowl to CDA President.
- 428 **President's address**
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- 428 **ODA President's address**
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- 429 **CDA awards**
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- 430 **ODA honors two members**
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- 432 **New President of ODA**
Dr. Douglas B. Smith is installed as President of the ODA.
- 434 **Convention Vignettes '82**
A photo kaleidoscope of Convention activities in Toronto, May 9-12,

In the News

- 423 **Hepatitis B vaccine in fall**
Dr. James H.P. Main says enough hepatitis vaccine will be available in the fall for all high-risk groups in Canada.
- 424 **New complex opened at Laval**
A \$6 million building complex at Laval University's dental school was opened.
- 436 **"Common sense" in CPR treatment**
Dr. Gary Pitkin advises how CPR rescuers can avoid legal entanglements after giving emergency treatment.
- 437 **Answer to nursing bottle syndrome**
Dr. David Kenny says that the answer to this prevalent problem is "brutally simple."
- 438 **Briefly**
Dental news items from around the world are highlighted.
- 442 **CDA Resource Centre**
A new collection of articles on the subject of "Computers in Dental Practice" is listed.

Publications

- 455 **Textbook of Pediatric Dentistry**
"Braham and Morris, recognizing the complexity of their subject, have gathered the expertise of 30 contributors and have produced a text which attempts to deal with most aspects of children's dentistry." — Melvin D. Charendoff.
- 456 **History of Dentistry**
This volume, with fine quality illustrations and literally thousands of references, "rightfully belongs in every dental faculty library, but it is unlikely to find its way onto many dentists' shelves, which is a pity." — John H. Gryfe.

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CDA/ODA
Convention

Oral Pathology

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Éditorial

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- 444** **L'ADA rend hommage à l'ADC**
Le Dr Robert Griffiths, président de l'ADA, a remercié l'ADC de sa collaboration en présentant un bol d'argent au président canadien.
- 446** **L'ADC remet trois distinctions**
Le Dr J. Bruce Taylor a été fait membre honoraire de l'ADC, tandis que le Dr John Warren Mackay et M. Henry Thornton ont reçu le prix pour services émérites.
- 447** **Assistance record au Congrès**
Le Congrès conjoint de l'ADC et de l'ADO, qui a eu lieu du 9 au 12 mai à Toronto, a battu les records de participation avec 4 144 inscriptions.
- 448** **Le discours du président**
Le Dr Donald E. Williams a incité les membres de l'ADC à exercer des pressions pour combattre les politiques défavorables du gouvernement fédéral.
- 449** **Les docteurs honorés par l'ADO**
Les docteurs P. Moran et R. Kellen ont reçu la récompense Barnabus Day.
- 449** **Le nouveau président de l'ADO**
Le Dr Douglas B. Smith est installé à la présidence de l'ADO.

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Une nouvelle série d'articles portant sur les ordinateurs dans les cabinets dentaires est énumérée ci-dessous.
- 444** **Le vaccin B contre l'hépatite**
Le Dr James H.P. Main annonce qu'il y aura à l'automne suffisamment de vaccin contre l'hépatite pour répondre, au Canada, aux besoins des groupes les plus sujets à la maladie.
- 445** **Un nouveau pavillon dentaire à Laval**
La faculté de médecine dentaire de l'Université Laval a inauguré son nouveau pavillon dont la construction a coûté six millions de dollars.
- 451** **En bref**
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- 453** **Le "bon sens" en réanimation**
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Journal

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juillet
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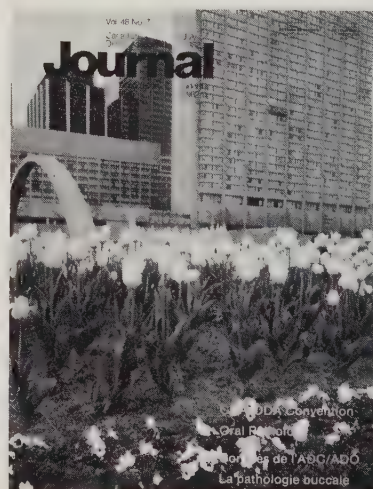
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Congrès de
l'ADC/ADO

La pathologie
buccale

CPR: DENTISTRY'S TALKING PROUD

It has been said that the amount of professional knowledge and expertise available for a dentist to assimilate has effectively doubled every five years over the last century. As a result of this, it is with some degree of real pride that dentistry has always been able to point to its exemplary performance in continuing education and updating. Continuing education, of necessity, plays a major role in each of our lives.

In the past five years, the life-saving technique known as cardio-pulmonary resuscitation, or CPR, has gained enormous interest not only in dentistry but amongst the public in general. Early in 1977, I first became a card-carrying basic cardiac life support rescuer under the auspices and training of the Ontario and Canadian Heart Foundations. A little later that same year, I successfully passed their Instructor's level criteria and have maintained this certification ever since.

In 1977, about 25 of us in the dental profession in Ontario became CPR Instructors. Most were dentists, but included in this group were representatives of our auxiliary arms, hygienists and assistants. We formulated the plan to make dentistry a target group within the province. We set out to either train ourselves or promote the training of every dentist and his/her staff in Ontario. By 1980, our Instructor's records indicated that approximately 90 per cent of the profession and our auxiliary staff members had been successfully trained at the basic rescuer level in CPR. A great number of these had been trained by this core group of 25 instructors and some had been trained as a result of interest awakened by other CPR instructors in related fields. This 90 per cent figure has increased since 1980 to a point where we feel that it is close to 100 per cent this year.

Ontario is not unique in this activity. The interest in CPR has been not only province-wide, but country-wide and, in fact, throughout North America. Our profession

can pride itself in being in the forefront of this interest and activity. The moral responsibility exhibited by dentistry always goes *without* saying — but in this case it goes *with* saying. We should be proud of our leadership in this field and the work that has gone into achieving this level of expertise.

CPR is a dynamic technique, however, as I am sure most of you realize. Sequences, rationales and performance criteria are constantly reviewed, reinforced or changed as seen fit by the national advisory body in conjunction with the criteria standards committee of the American Heart Association. Techniques I learned five years ago as both a basic rescuer and an Instructor have undergone enormous change several times since that time. It is of paramount importance therefore that each of us remains current in the accepted techniques of CPR if we are to continue to profess that we are truly expert in its execution.

Recertification in CPR should be looked upon to be as much a duty for our profession as the upgrading of our dental skills. I stress the dynamic nature of CPR as each change in technique brings about improvement and the very real potentiality of more lives being saved. It is important that each year you renew your responsibility in this training. It's most definitely one of the more important facets of our continuing education record. Contact your provincial dental association or Heart Foundation for information regarding updating recertification programs and keep dentistry's pride in CPR alive and well. CPR is one continuing education course that may not increase your professional monetary worth but it most certainly will increase your human moral worth — something I consider to be of infinitely greater value.

*Dr. Gary Pitkin
Toronto, Ont.
Member, CDA Board of Governors*

UN SUJET DE FIERTÉ: LA RÉANIMATION CARDIO-PULMONAIRE

On dit que la somme des connaissances professionnelles qu'un dentiste peut accumuler a doublé tous les cinq ans au cours du présent siècle. Aussi, touchant l'éducation permanente et les cours de recyclage, la dentisterie peut-elle, d'une certaine façon, se réjouir de ses réalisations. De fait, l'éducation permanente s'impose maintenant comme moyen de "survie."

Le mot est employé à dessein. Au cours des cinq dernières années, la réanimation cardio-pulmonaire en tant que technique pour sauver la vie a suscité beaucoup d'intérêt non seulement auprès des dentistes, mais auprès du public en général. Au début de l'année 1977, j'obtenais des Fondations du cœur du Canada et de l'Ontario une carte de sauveteur. Un peu plus tard la même année, je me qualifiais comme instructeur, titre que je conserve depuis.

En 1975, je partageais ce titre avec environ 25 membres de la profession dentaire en Ontario. La plupart étaient dentistes, les autres étant des auxiliaires, hygiénistes ou assistantes dentaires. Ensemble, nous avons décidé de faire de la profession dentaire un groupe cible dans la province, nous proposant soit de nous former nous-mêmes, soit de former tout dentiste ontarien et son personnel. En 1980, nous pouvions constater qu'environ 90 pour cent des membres de la profession, y compris les auxiliaires, avaient reçu une formation suffisante pour pouvoir réanimer un patient au besoin et lui sauver la vie.

La majorité de ces gens ont été formés par les 25 instructeurs du groupe initial. Les autres se sont initiés à la réanimation grâce à l'intérêt qui y ont pris des disciplines connexes. Maintenant, ce pourcentage frise 100 pour cent, croyons-nous.

L'Ontario ne constitue pas un exemple unique. L'intérêt pour la réanimation s'est étendu non seulement à toute la province, mais à tout le Canada ainsi qu'à toute l'Amérique du Nord. Et dans ce cas-ci, la profession dentaire peut

s'enorgueillir de figurer au premier rang. *Il va sans dire* que les dentistes ont toujours fait preuve d'une responsabilité morale dans l'exercice de leur profession, mais cette fois, *il convient justement de le dire*. Nous avons droit d'être fiers de l'initiative que nous avons prise dans ce domaine et du travail accompli pour atteindre le degré d'excellence où nous sommes parvenus.

Comme vous le savez sûrement, la réanimation cardio-pulmonaire est une technique dynamique. Conjointement avec le comité de normalisation des critères de l'*American Heart Association*, le conseil consultatif du Canada travaille sans cesse à réviser, renforcer ou modifier au besoin les critères touchant l'enchaînement des opérations, les raisons d'y recourir et leur efficacité. Aussi les techniques admises il y a cinq ans ont-elles beaucoup changé. C'est pourquoi il est primordial que nous, les dentistes, si nous voulons rester des experts dans la matière, continuions à nous renseigner sur les techniques de réanimation.

Pour nous, la mise à jour de nos connaissances en réanimation doit importer autant que celle de nos connaissances dentaires. Je souligne l'importance des changements incessants dans le domaine parce que, chaque fois, la technique s'en trouve améliorée et les chances de sauver des vies, accrues d'autant. Il convient donc de revoir chaque année nos connaissances sur le sujet et celui-ci doit très certainement primer en éducation permanente.

Pour ce faire, je vous invite à communiquer avec l'association dentaire de votre province ou avec la Fondation du cœur et à vous renseigner sur les cours de recyclage qui se donnent en réanimation. Certes, ce n'est pas un sujet susceptible d'augmenter votre revenu, mais d'un point de vue moral, vous vous sentirez meilleur, — et pour moi, cela vaut infiniment mieux.

*Le Dr Gary Pitkin, Toronto (Ontario)
Membre du Conseil d'administration de l'ADC*

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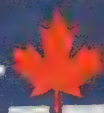
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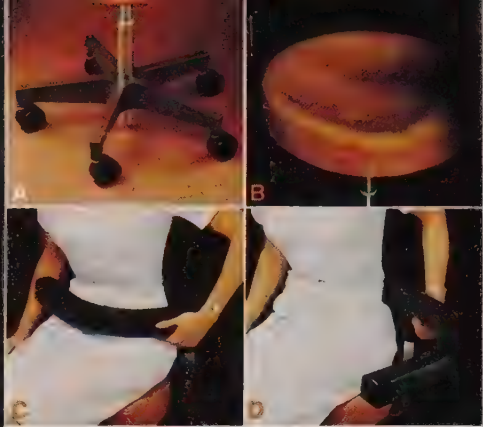
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Scientific study contains 'flaws'

I am writing to comment on the paper by Tam *et al* entitled, Chondroitin sulfatase-producing and hyaluronidase-producing oral bacteria associated with periodontal disease, which appeared in the February issue of the Journal. The report presents an interesting study but also contains a number of serious flaws which affect the results obtained and the conclusions drawn from them. I would like to limit my remarks to five points.

Point 1

One of the main strategies employed by the authors to help in determining "the incidence (sic) and nature of microorganisms" that may be related to periodontal disease, consists of classifying patients into periodontally healthy and periodontally diseased groups. For a study in which etiological bacteria are the main focus, Tam *et al* appear to have chosen an inefficient classification scheme, and moreover, may not have applied their stated classification scheme in a consistent manner.

With respect to the first problem, since the loss of periodontal attachment lags behind the etiological cause, the decisive bacterial activity leading to the measured attachment loss is, to a certain degree, a passed event. Indeed, it is possible to contemplate patients with considerable past periodontal treatment, who are now in a good maintenance state. Such patients would be categorized as diseased based on the authors' use of "obvious periodontal destruction" as the classification criterion. Since such patients are now in an acceptable maintenance state, there is no reason to postulate the sort of microbial activity generally associated with progressing disease.

With respect to the second problem, inconsistent classification, one notes three patients in the diseased group whose "obvious periodontal destruction" is less than or equal to 3.5 mm while another three patients with an equal attachment loss of 3.0-3.5 mm

are classified as periodontally healthy. If one is to suppose that the mean gingival index (GI) was taken into account, one observes that "diseased" patient 20 (Table 2) is still healthier than "healthy" patients 2 and 3 (Table 1). The authors might contend that attachment loss reported in Tables 1 and 2 was based only on the two sampled teeth while the periodontal status classification was based on all teeth. While the article does not imply this, if it were so the research design inefficiency would only be compounded.

Incidentally, it is hardly credible that amongst 12 periodontally diseased patients the mean GI could be 0.69 with 5 of 12 patients exhibiting a GI of less than 0.5. That 6 of 10 adults, albeit healthy ones, have a 0 GI seems equally doubtful.

Point 2

Averages are deceptively simple and it appears to me that the main outcome data "average percent active colonies" are wrongly calculated in Tables 1 through 4. What the authors have done is summed the active colonies over site 1 and 2 and divided by the combined total colonies to obtain a percentage. Under the assumption that both sites provide equally valid information, the proper procedure would have been to calculate the percent active colonies for each site and then to find the simple average of the two percentages. Take patient 16 in Table 2:

$$\text{Average percent active colonies (Tam et al)} = \frac{19 + 26}{55 + 29} \times 100 = 53.6\%$$

$$\text{Average percent active colonies (unweighted)} = \frac{\frac{19}{55} + \frac{26}{29}}{2} \times 100 = 62.1\%$$

The problem is that the method used by Tam *et al* provides a weighted average where the weight is greater for the site with the larger number of total colonies. There is, however, no *a priori* reason to believe that this is a desirable procedure unless one were willing to believe, for example, that a count of fewer total colonies is associated with greater technical error. If, for some reason, weighting is desired

then one accepted procedure is to employ the inverse of the variance.

Point 3

The analyses correlating attachment loss to chondroitin sulfatase as well as to hyaluronidase producing bacteria (Figures 3 and 4) are inappropriate. Two sorts of errors appear. First, Tam *et al*'s procedure of pooling two disparate population samples (healthy and diseased subjects) violates an underlying assumption of correlation analysis and has the effect of falsely elevating the correlation coefficient, in this case to 0.52. Notice that in Figure 3, for example, the plots for the healthy subjects are all bunched between 2.5 and 3.5 on the x-axis. When the relationship between percent chondroitin sulfatase producers and loss of periodontal attachment is determined among "healthy" subjects only, a lower and *negative* correlation coefficient of $r = -0.34$ is obtained. Similarly, when the data for the diseased subjects are separately examined the correlation remains positive but drops to $r = 0.44$. Not only are both coefficients lower than the one reported by the authors, neither of them are significant at $p < 0.05$. Similar results hold for the hyaluronidase data.

Furthermore, since percent chondroitin sulfatase producers is correlated with percent hyaluronidase producers, $r = 0.75$ and $r = 0.66$ in healthy and diseased subjects respectively, and since both variables are correlated with attachment loss, it follows that the plot for chondroitin sulfatase (Figure 3) captures the effect from hyaluronidase and *vice versa* in Figure 4. Hence it should be made clear that the two reported correlations do not represent bivariate relationships.

Point 4

It seems to me that Tam *et al* have overlooked the importance of age as an independent variable in determining periodontal status. Yet a casual inspection of Table 1 and 2 or Table 3 and 4 shows the sharp differences in the ages of the subjects classified. Indeed, following Tam *et al*'s approach of using pooled data, age is

just as good a predictor of periodontal attachment loss ($r = 0.51$, $df = 20$) as is percent chondroitin sulfatase producers ($r = 0.52$, $df = 20$) or percent hyaluronidase producers ($r = 0.56$, $df = 16$). This strongly suggests that age be incorporated into the analysis, preferably by means of an appropriate multivariate procedure. Just to illustrate the effect achieved, using Tam *et al*'s pooled data, regressing attachment loss on age and hyaluronidase ($n = 18$) produces a multiple $r^2 = 0.477$. Adding a third variable, chondroitin sulfatase, results in a multiple $r^2 = 0.478$, or virtually no increase. In short, Tam *et al*'s pooled data suggest that when age and percent hyaluronidase producers have been taken into account, percent chondroitin sulfatase producers has no remaining predictive value for periodontal attachment loss, further supporting the last observation made in point 3 above. Another perspective is to recognize that whereas Tam *et al* claim a significant relationship ($r = 0.52$) between attachment loss and chondroitin sulfatase producers, removing the effect of subject age and hyaluronidase lowers the chondroitin sulfatase to virtually no relationship with attachment loss as exemplified by the partial $r = 0.043$.

Point 5

There are a number of smaller matters. For example, I am sure that Tables 3 and 4 are mislabelled, perhaps the fault of the printer. Also, patient 16 in Table 4 is stated as presenting different attachment loss from patient 16 in Table 2. Similarly, patient 20 has GI and attachment characteristics in Table 4 that are incompatible with those in Table 2. For this reason, I have chosen to use the attachment data from Table 2 for the multiple regression analysis under point 4.

In conclusion, the paper by Tam *et al* presents data from an interesting project. Nevertheless, the information published could have been considerably strengthened by greater attention to research design on the one hand and, more specifically, by even reasonable care in the analysis of the raw data on the other. At the same time,

it would be fair to observe that in this case the Journal's scientific review procedure has not served the authors or the readership particularly well. Professional and scientific reputation is a cherished commodity and is usually preserved by adherence to well-established scientific standards.

John W. Stamm, DDS, DDPH, MScD, FRCD(C), Dip. (ABDPH), Professor and Chairman, Department of Community Dentistry McGill University, Montréal.

Larger scientific section urged

I have great concern that our national dental journal is becoming a glossy newsletter rather than a scientific publication. Discussion with my colleagues confirms my feeling that this concern is not unique. Canadian dentistry faces the world through its national journal. It must seem to others that the advancement of our scientific foundation has little interest to Canadian dentists. I don't believe that this is true.

Unlike other national journals, the scientific portion of ours has been relegated to the back pages. The very few articles (three or less) often tend toward concise case reports and "how to do it" papers which, while useful, may be better placed in a publication which is not meant to be national and international.

Allow me to use two issues as examples. In the November 1981 issue there are 60 one-sided pages. The scientific component was five one-sided pages (two short articles) using eight per cent of the total available space. Regardless of the value of the material in the scientific or the general section, could we agree that eight per cent of a national dental journal devoted to scientific material is a bit of a sham? The March 1982 issue has three articles, one of which (The Copper Band for Matricing Problems) is a good example of the type of article which must discourage continued support. This simple technique is taught in undergraduate schools. The article

offers nothing new. To make matters worse, it is authored by non-Canadians, one of whom is not a dentist but a "counsellor in psychology".

Not only does the inclusion of articles such as these lower prestige but Canadian authors must wait even longer periods to have current research published. All articles should be of high quality, those by non-Canadians should have special merit.

I realize that scientific articles do not bring in revenue but it should be possible by judicious editing, e.g. not using so much blank space, making pictures and titles smaller, less language duplication, etc., to make space for a scientific section of which Canadian dentists could be proud.

Publications such as the Journal of the American Dental Association, British Dental Journal and Australian Dental Journal are examples of national journals which appear to hold scientific presentations in high regard. I would like to believe that *our* Journal was eager and willing to publish acceptable current Canadian research and general scientific articles promptly and in sufficient numbers appropriate to its stature as a national Journal.

Dr. Stanley Kogon, Department of Oral Medicine, University of Western Ontario

Disagrees with Dr. Covit

I believe that there is a fallacious assumption made by Dr. Covit in his letter to the Journal (March 1982, p. 143) when he states that "a very small minority of Canadian dentists belong to the Federation Dentaire Internationale", and that for this reason the Canadian Dental Association should withdraw from membership of the FDI.

It may well be true that few Canadians choose to make an additional contribution to the International conduct of dentistry by becoming Supporting Members of FDI. Many would have no reason to do so as they cannot attend meetings of the Asso-

Letters (Continued)

ciation with any regularity. However, nearly every dentist in Canada is a member of CDA either by choice or by way of an agreement between his licencing College and the Association. The membership expects the CDA to represent their best interests at all times, at the local level, at the national level, and certainly at the international level. Canadian dentists are not so advanced in patient management, in education, in research, or in manufacturing, that we can isolate ourselves from the rest of the World, or concur in the isolation of the North American continent, from international dentistry. Such a move would not promote a cooperative development of dentistry for the future, but could well alienate our friends in many other countries.

The question of an equitable distribution of financial responsibility for the administration of FDI is certainly a topical one, and has been repeatedly debated by Provincial, and National executives, and by the General Assembly of FDI. One must question the rectitude of a decision to withdraw from membership. Perhaps there is an opportunity for some less devastating demonstration. Should we hear the division bells ringing in Vienna? If one accepts Dr. Covit's figures, one may calculate that our relationship with FDI costs each dentist in Canada \$3.00 per annum. Is \$3.00 per dentist per annum an unreasonable cost for the maintenance of our international relationships?

I hope that Dr. Covit will have the vision to see the great need for the existence of the Federation, even though his experience of activities within the General Assembly may not have endeared the organization to him. In my experience, the greatest work of the Federation has been accomplished outside the Assembly, in the working groups, in the Executive, and in the trade, social, and scientific sessions. We cannot afford to be deprived of its services.

*Peter Stevenson-Moore,
BDS, LDS, RCS, MSD,
Vancouver, B.C.*

Hepatitis B vaccine for all high-risk groups by fall

Enough vaccine against Hepatitis B, one of the most serious diseases that strikes dental offices, will be available in the fall to immunize all high-risk groups in Canada.

Dr. James H.P. Main, president of the Royal College of Dentists of Canada, told the CDA Journal that it will become available in a "much larger quantity than originally anticipated."

Dr. Main had told an audience during the CDA/ODA Convention in Toronto that the vaccine developed and produced in the United States, would probably have to be distributed on a priority basis, because at that time it was believed that only a limited quantity would be available.

Because of the limited supply, he said, provincial ministries of health in Canada had encouraged the setting up of advisory committees to determine priority ratings. In Ontario, Dr.

James Rankin had been named chairman of the semi-official committee.

The most susceptible groups identified included: oral surgeons, pedodontists, endodontists, hospital dentists, dentists in mental institutions and prisons, and their dental assistants.

Because it is a human serum vaccine, developed from human blood provided by volunteers, it is still not being produced in great quantity and the cost is "quite high," Dr. Main said. Each individual will require three shots, for a total cost of about \$160.

Some of the non-dental groups in society considered to have high priority status will be: families in which one or more members are carriers, or have the disease; patients with other diseases who are particularly susceptible, such as haemophiliacs; health care workers, including blood transfusion technicians, nurses in renal/dialysis units and surgeons of all types; residents of institutions, particularly mental and prison inmates, and also, homosexuals and prostitutes.

Inmates of mental institutions and prisoners are included because "they can't fight for it (the vaccine) on the open market," Dr. Main said. Homosexuals and prostitutes are cited because "they act as a pool of infection" in society and can transmit it to large numbers of people.

The original group of blood donation volunteers who aided in the development and production of the vaccine were mostly from the homosexual community in New York because they have a high incidence of Hepatitis, Dr. Main said.

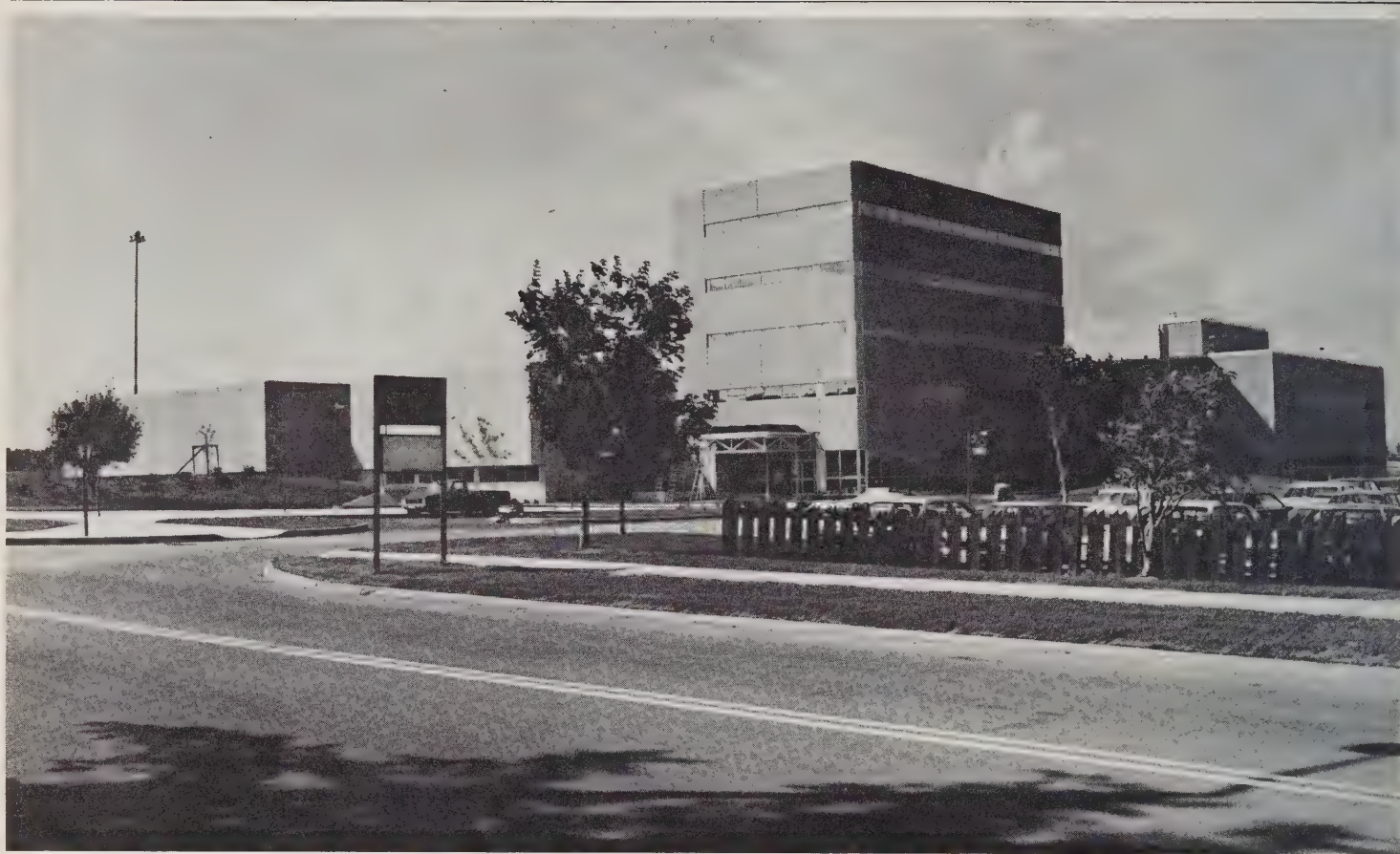
At the CDA Convention, Dr. Main said it was hoped there would be enough vaccine "for the whole dental profession" in Canada, in the not-too-far-distant future. Now it appears that all dentists and their assistants, if they want it, can begin to receive the vaccinations when the larger supply becomes available this fall.

CDA looks after broad interests

I was pleased to read in the January issue of the Journal a piece about CDA/CSA relationships. It is time the profession knew of the close relationship between these bodies. Your article, however, concentrated on the solely dental aspects of CSA. Having just finished several years representing the CDA on CSA/IEC/TC 62, CSA/IEC/SC 62B and CSA/IEC/SC 62C, all of which deal with radiology in its various forms, I feel that dentists should be aware the CDA is looking after their interests in a wider area of CDA/CSA interests than those solely or mainly dental in nature.

*A. Ruprecht, DDS, MScD, FRCD(C)
Professor of Oral Radiology
King Saud University
Saudi Arabia.*

New complex doubles Laval dental school floor space



The new \$6 million Phase 2 complex of the Laval University School of Dental Medicine was formally opened on April 29.

A new, \$6 million, three-module complex for Laval University's School of Dental Medicine was officially opened on April 29 at Ste. Foy, Québec.

Begun in 1980, Phase 2 of the construction program to house the 11-year-old School increases the functional space from 45,000 to 90,000 square feet. It has been designed to eventually train 50 dental students a year.

Jean-Guy Paquet, Rector of Laval University, presided at the opening ceremonies, along with Denis Lawson, representing Health and Welfare Canada, Denis Lazure, Québec's Minister for Social Development, Dr. Roland Vallée, director of the School, and representatives of the CDA — President, Dr. Donald E. Williams and Executive Director, Hubert Drouin. Dr. Jean-Guy

Landry, President, Dr. Pierre Y. Lamarche, Director-General and Dr. Charles E. Gosselin, Registrar, all of l'Ordre des dentistes du Québec, participated in the event. Dr. Y. Giguère represented the QDSA and a former CDA president (1971) Dr. L. Bernier, of Sillery, Que., were among the honored guests.

Module A of the new complex, located at the west end of the new School, contains, on level one, some 10,000 square feet of laboratory facilities for research work. It also houses a controlled environment room and a giant autoclave. The second floor is for first and second year students with two large pre-clinic laboratories, large enough to accommodate 55 students in each.

Module B houses the School's administration offices on the first floor and on the second, areas are

devoted to audio-visual and other electronic teaching aid facilities.

Module C, a five-storey building, houses a cafeteria, a surgery clinic, with eight rooms and dental offices, each insulated against X-ray penetration. Faculty offices are located on the upper floors.

An older building, renovated during Phase I of the building program, and opened in 1977, serves mainly students in third and fourth years and houses the professors' clinic and quarters for graduate students.

The new complex will allow the School to respond to the needs of Eastern Québec, through its teaching and research, until the beginning of the year 2,000, officials predicted.

Since it was founded, the School has graduated 127 students who are working in all parts of the Province, but particularly in Eastern Québec.

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Convention attracted record attendance

Spring brings out the leaves and flowers, and also — the dentists.

The combined Canadian/Ontario Dental Association Convention in Toronto, May 9 — 12, attracted a record attendance of 4,144 registrants, including dentists, spouses, guests, dental assistants, hygienists, and exhibitors.

In all, 103 companies exhibited at 203 booths throughout the convention.

Dr. George Stirling, convention chairman, and his committee had to make special arrangements to accommodate the large gathering. For most social events it was necessary to use the vast expanse of the entire Grand Ballroom of the Sheraton Centre.

Social events such as the Funn Runn, the music of vibraphonist Peter Appleyard, a theatre performance by Second City Revue, dances and luncheons, allowed dentists and their families an opportunity to mingle.

The highlight of the joint convention was the presentation of awards by the Canadian and Ontario Dental Associations to dentists and others who have contributed greatly to organized dentistry in Canada.

Dr. Bruce Taylor was the recipient of an Honorary Membership in the CDA, the association's highest distinction, at the CDA luncheon on Monday, May 10.

The CDA Distinguished Service Award was presented to Dr. John MacKay and Mr. Henry Thornton.

The honors were conferred by Dr. Donald E. Williams, President of the CDA.

Barnabus Day Awards were presented by the ODA to Dr. Roderick Moran, president of the ODA in 1973-1974 and of the CDA in 1978-79, and to Dr. Ronald Kellen, chairman of the Dental Prepayment Advisory Committee.

The Grieve Memorial Lecture was delivered by Dr. Arthur T. Storey and dealt with new perspectives in occlusion and malocclusion.

Dr. Louis Ripa discussed the Elimination of Dental Decay in the Child Patient; Dr. Charles Brodie-Brockwell lectured on the Excursal Angle and Myofacial Pain Dysfunction; Dr. Joseph Druck dealt with Endosseous Blade and Subperiosteal Implants; and Dr. Gary Pitkin discussed the Medical-Legal Aspects of Cardiopulmonary Resuscitation.

Tax and Investment Planning for Dentists was the topic of Dr. Jack Stockton's clinic. Dr. Frederick Lackie lectured on Occlusal Adjustment of the Natural Dentition and Dr. Simon Weinberg dealt with Com-

plications During and After Oral Surgery.

Dr. Herbert Shillingburg Jr. conducted a one-day clinic on a Simplified Approach to Cast Restorations while Dr. William Hettenhausen dealt with Generating Health in the Oral Environment. Drs. Joel Epstein, James Main, Anthony Parnell and Walter Sussel gathered for a panel discussion on De-Bugging Your Dental Office.

Other clinics held were: Surgical Endodontics by Dr. Joel Edelson, and Malpractice Miseries by Mr. Barry Wortzman.

In addition to the major clinics, ten mini-clinics and 41 table-clinics were conducted during the four-day convention.

ADA presents gift for CDA co-operation



Dr. Robert Griffiths, President of the ADA, right, made a presentation to CDA in appreciation of CDA's co-operation. CDA President Dr. Donald E. Williams acknowledged the gift.

An engraved silver bowl, a token of appreciation from the American Dental Association for "the years of co-operation from the Canadian Dental Association," was presented to CDA president Dr. Donald E. Williams at the CDA Convention in Toronto, on May 11.

Dr. Robert Griffiths of Charleston, Illinois, president of the ADA, made

the presentation.

He said the ADA has "felt very close to the CDA for some time," and the co-operation has improved over the years.

"I'm grateful," Dr. Griffiths said, "you've done it graciously and you've opened the door to assist in whatever we have planned to do. We hold you in the highest esteem."

Dentists must begin lobbying — Dr. Williams

"The politics of dentistry is as important to our survival as a thorough working knowledge of administration and clinical skills."

Dr. Donald E. Williams, President of the Canadian Dental Association, addressing a packed house at the CDA luncheon at the Convention in Toronto, on May 10, said Canadian dentists must begin lobbying against federal policy which adversely affects the public.

To this end, the President reported that the CDA has maintained an intense lobby to fight the proposed federal tax on dental premiums paid by employers.

The Association is also in contact constantly with the federal departments of health and welfare, finance, revenue and the tariff board, concerning tariffs and dental supplies, the dental therapist program, research grants, the working group in dental hygiene and a new fluoridation promotion, Dr. Williams said.

"The establishment of CDA headquarters in Ottawa was no accident," Dr. Williams said. "It was planned to enhance our ability to influence decision makers so that we could clearly explain your policies in the interest of all Canadians."

Provincial concerns

While CDA is busy meeting with federal government officials, the provincial associations are preoccupied with the activities of their provincial governments, he reported.

Newfoundland is writing a new dental act and proposing new regulations for the children's dental program; Nova Scotia has commissioned a task force to review the children's dental program there, and Prince Edward Island is reviewing its children's program. New Brunswick is also working on a dental act and negotiating a new dental welfare agreement.

Quebec has proposed a bill allowing the government to impose its will by decree in such areas as job placement, remuneration for doctors, and a new preventive program for children outside the private dental office, Dr. Williams said.

In the West, B.C. is being challenged by the denturists concerning partial and immediate dentures while Alberta has a new dental act in the planning stage. Saskatchewan has just expanded the children's dental plan and Manitoba must now deal with a new government.

At the national level, the Canadian Dental Association continues to carry out the accreditation of the dental schools with assistance from the profession, dental schools, registrars of licensing bodies, the Association of the Canadian Faculties of Dentistry, the Royal College of Dentists of Canada, the National Dental Examining

Board, the Canadian Dental Hygienists' Association, the Canadian Dental Nurses and Assistants' Association and the dental students.

The accreditation process "protects the public from unskilled and untrained practitioners (and) gives the public confidence in the profession," Dr. Williams said.

"This confidence in the profession by the public created by the accreditation process in the main, is the most important reason why all dentists must be members of the Canadian Dental Association. Like fluoridation, accreditation is a continuous process and provides lifetime benefits to all."

Dr. Williams said the 13,000 dentists spread across Canada must work together as a team "in a spirit of trust, mutual respect and with a desire to understand one another."

Economic factors create dilemma

Dentists are facing a dilemma because of economic conditions in Ontario and Canada, Dr. Robert Schiewe, outgoing president of ODA told delegates at the CDA/ODA Convention in Toronto.

The personal and practice expenses of dentists are being affected by inflation "to the same degree that is felt by everyone else — but our patients are also feeling the pinch and many are choosing to cut back on the number of visits they make to the dental office," he said.

The needs of the dentists should be alleviated by an increase in fees, but if they take that action, they may make services unavailable to people in need of dental care, he continued.

Another area of economic concern identified by Dr. Schiewe was the re-

duction in level of reimbursement patients now receive for dental services provided in hospitals. When the OHIP program was introduced in 1969 it included payment at 90 per cent of the suggested ODA fee guide. Since that time, he said, OHIP premiums have increased considerably and also dental fees. But the dental component has been increased only once in 13 years. Dental patients, he said, now only receive half of their expense, instead of 90 per cent. Dr. Schiewe said the ODA must press for a "significant increase at this time so that responsibilities to these patients is not abandoned."

The ODA, he said, had recently met with the new Ontario Health Minister, Larry Grossman, to press this point.

Dr. Bruce Taylor awarded CDA Honorary Membership

Dr. J. Bruce Taylor of London (Ont.) was awarded the Canadian Dental Association's highest honor — Honorary Membership — and Distinguished Service Awards were given Dr. John Warren MacKay of Saskatoon and Mr. Henry Moser Thornton, of York, Pennsylvania, at the CDA Convention in Toronto, on May 11.

President of the CDA, Dr. Donald E. Williams, of Moncton, N.B., conferred the honours, on behalf of the membership.

Honorary Membership is conferred on persons deemed to have rendered exceptional constructive services nationally and/or internationally in any field of dentistry.

The award recognized Dr. Taylor's devotion to the ideals of the CDA while serving six years (two three-year terms as treasurer, from 1969 to 1975), his membership in the International College of Dentists, and as president of the Ontario Dental Association in 1966/67. His service in the Royal Canadian Dental Corps in the Canadian Army and Royal Canadian Navy in the Second World War was also cited.

Dr. Taylor, the son of a dentist, Dr. H.D. Taylor, is a graduate of the University of Toronto Faculty of Dentistry, in 1943. He is also a past president of the London & District Dental Society.

The Distinguished Service Award is conferred on those who have rendered outstanding service to the CDA.

Dr. MacKay

Dr. MacKay received his award for service in various CDA offices he has held.

He was a member of the CDA Board of Governors from 1976 to 1981. He also served as a member of the Executive Council from 1979 to

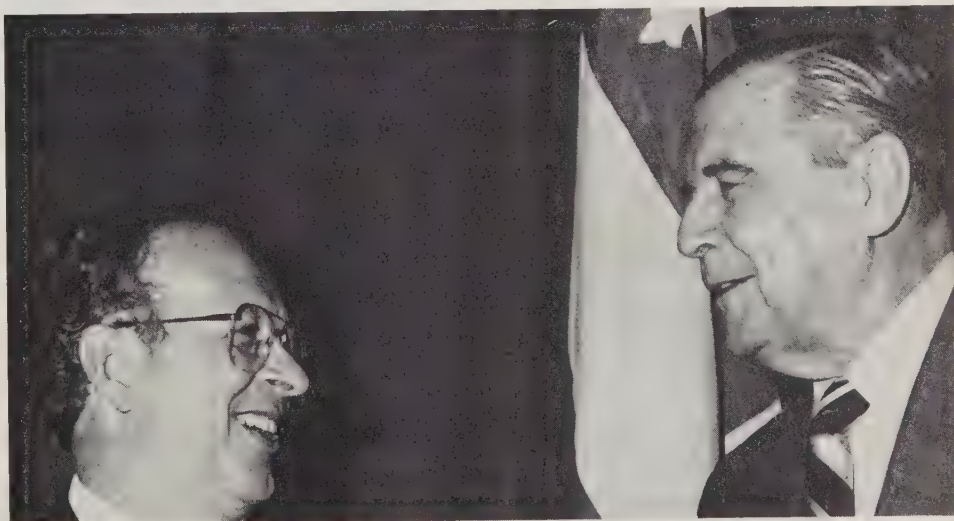
(Continued on page 430)



Dr. J. Bruce Taylor, left, received an Honorary Membership, CDA's highest award, from CDA President Dr. Donald E. Williams at the CDA luncheon.



Dr. John Warren MacKay, left, of Saskatoon, receives the Distinguished Service Award from CDA President Dr. Donald E. Williams.



Mr. Henry Moser Thornton, right, chairman and chief executive officer of Dentsply International, receives the Distinguished Service Award from CDA President Dr. Donald E. Williams.

Convention '82

CDA awards (Continued)

1981. Other CDA bodies to enjoy his counsel and guidance were the Council on Dental Services and Council on Dental Care, from 1972-76. He was chairman of the Dental Service Committee of the Council on Dental Care.

Dr. MacKay, a graduate of the dental faculty of the University of Alberta, has also given leadership to the dental community in Saskatchewan. He was a council member and is a past-president of the College of Dental Surgeons of Saskatchewan, and a past-president and secretary of the Saskatchewan Dental Society.

He has also been an educator. For

two years, Dr. MacKay was a part-time staff member of the University of Saskatchewan College of Dentistry.

Mr. Henry M. Thornton

Mr. Thornton, one of the few non-dentists to receive a Distinguished Service Award, has given strong leadership in support and funding of dental education.

Now board chairman and chief executive officer of Dentsply International, he led a major fund-raising campaign for dental education, while president of the American Dental Trade Association. Under Mr. Thornton's leadership, further direct support has come to the dental education

field and to the dental profession. This was through Dentsply's sponsorship of the student table clinic program at the annual sessions of the Canadian, American and British Dental Associations.

His company also provided "seed" money for the inauguration of the American Fund for Dental Health, and this support continued to make possible the establishment of the Canadian Fund for Dental Education.

He holds honorary degrees from Loyola University, Montreal; Northwestern University, Chicago; Dalhousie University, Halifax, and York College, Pennsylvania.

Drs. Roderick Moran, Ronald Kellen honored by ODA

Dr. Roderick L. Moran, president of the ODA in 1973-74, and Dr. Ronald M. Kellen, a member of the ODA Board of Governors since 1974 received the Barnabus Day Award for Distinguished Service, on May 11, at the CDA/ODA Convention in Toronto.

ODA president Dr. Robert Schiewe made the presentations to recognize outstanding service to the profession of dentistry, for a single outstanding contribution or for sustained service to the profession for not less than 20 years.

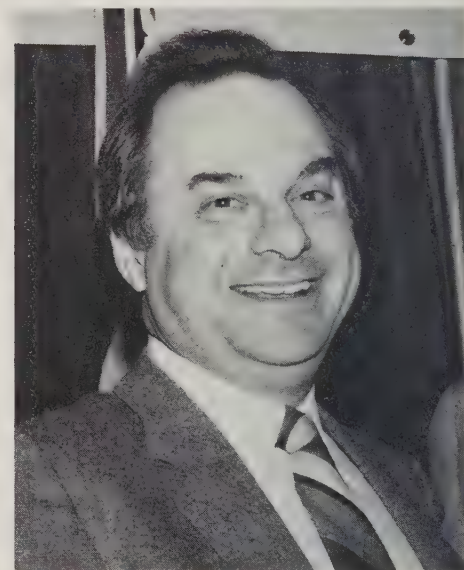
Dr. Moran was president of the Canadian Dental Association in 1978-79 and has been an officer of the Canadian Dental Association Service Plans Incorporated from 1975 to the present.

As an officer of the CDA, he participated in the growth and development of this organization through the turbulent period of restructuring and relocation, and assisted greatly in building a sound financial and structural base for the continued operation of the national association.



Dr. Roderick L. Moran

Dr. Kellen, as chairman of the Dental Prepayment Advisory Committee was honored for "exemplary leadership to the committee that developed current policies, standards and guidelines" for relationship with prepaid dental plans. The policies developed at that time are accepted almost universally by the dental profession and insurance industry across Canada.



Dr. Ronald Kellen

While he was a member of the ad hoc Dental Services Advisory Committee, Dr. Kellen contributed greatly to the research and policy development which resulted in the publication of "The Changing Dental Profession — New Directions for Practice in the 80's and Beyond." This provided the basic information to develop policies and strategies for new forms of dental practice.

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On the other hand, the Canadian Dentists' Insurance Program will provide up to \$48,000 of annual indemnity, tax-free, protecting against any drop in standard of living. The example below shows how the dental associations' plan does a much better job of protecting the standard of living of a dentist whose earnings are close to the national average.

Dentist's annual before-tax income	\$60,000
Dentist's approximate "disposable income" (\$60,000 minus income tax and government pension contributions). This is the amount on which current living standard is based ¹	\$40,000
Dentist's maximum after-tax income during disability, if maximum coverage has been purchased from typical insurance company	\$28,500
Loss of Income	\$11,500
Dentist's tax-free income during disability, if maximum coverage has been purchased from Canadian Dentists' Insurance Program ²	\$48,000

How much coverage do you need?

You'll probably need at least 80% of after-tax income, plus a Cost-of-Living Option, to maintain your present standard of living during a prolonged disability — less if you have significant investment income; more if you have a large family or substantial debts.

If you already have private disability insurance, you can still use the Canadian Dentists' Insurance Program to bring your total coverage to an adequate level. And with CDIP's low rates, it's easier to get the amount of coverage you need.

Today is a good day to review your disability coverage. If you need assistance or information, call CDSPI. We're here to help, not to sell insurance.



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¹ After-tax income shown is based on average provincial tax assuming dependent spouse and two children. Actual after-tax income may vary from \$39,000 to 42,000 depending on your province.

² Benefit from CDIP Disability Insurance may be reduced if total disability income from all insurance and government plans is greater than pre-disability, before-tax income.

Convention '82

Dr. Douglas B. Smith installed as new president of ODA



Dr. Robert Schiewe, left, hands over the President's Chain of Office to new ODA President Dr. Douglas B. Smith of Belleville at the ODA luncheon.

Dr. Douglas B. Smith of Belleville received the chain of office as president of the Ontario Dental Association from outgoing president Dr. Robert Schiewe of Thunder Bay at the CDA/ODA Convention in Toronto on May 11.

Dr. Smith told members that one of the major thrusts of the Association under his leadership will be programs to provide more incentive for dentists to assist patients to recover benefits to which they may be entitled from pre-paid dental plans offered by insurance companies.

He advised members that in the interest of patients and the dental profession, third parties must not be allowed to become involved in

the decision-making process regarding the nature of dental services that should be provided to patients.

Current economic factors and possible effects are also a concern of Dr. Smith. "Our province, indeed our whole society, is faced with significant economic difficulties. We must find a way of balancing the legitimate economic aspirations of our profession with the desperate financial problems of the people who seek our services."

Dr. Smith has a general dentistry practice in Belleville, where he resides with his wife Janet and two daughters, Karen, age two and Jillian, three months.

He is active in community affairs and enjoys sailing on the Bay of Quinte.

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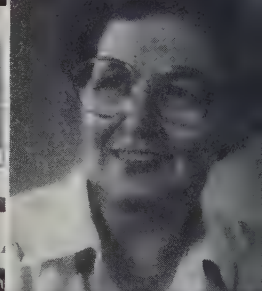


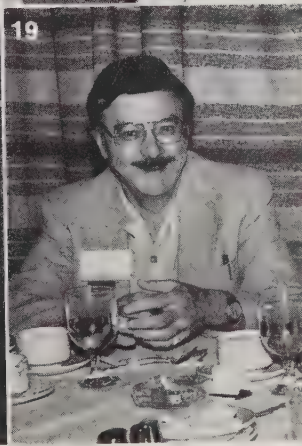
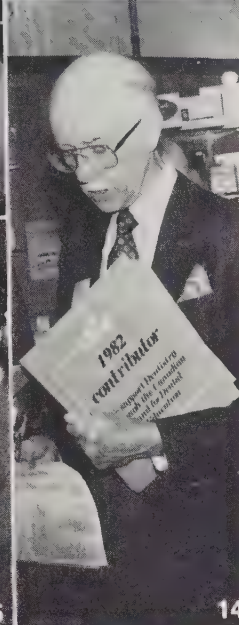
BRINGING IMAGINATION AND
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Convention '82

1. Dr. Donald E. Williams, President of the CDA and Dr. George Stirling, CDA/ODA Convention Chairman, share a joke.
2. Seated at the head table for the CDA luncheon, are, left to right: Dr. R.D. Sexton, Dr. John MacKay, Dr. Gilbert Utas, CDA Past-President; Dr. J. Bruce Taylor, and CDA President, Dr. Donald E. Williams.
3. CDA staff member Kathy Mactaggart was on hand to answer queries at the CDA booth.
4. "Captain George Vancouver", alias Dr. Ted Ramage, made a surprise appearance at the CDA luncheon, in all his nautical finery. He invited everyone to attend the 1983 Convention in Vancouver.
5. CDA Executive Director, Hubert Drouin, presented roses to (left to right) Mrs. Elaine MacKay, Mrs. Doris Thompson, Mrs. Tess Williams and Mrs. Aileen Taylor, at the CDA luncheon.
6. Mrs. Aileen Durham, Convention Manager for ODA, who solved everyone's problems.
7. Mr. Cyril Gallant and Esme Spilar from CDSPI explain policies to a dentist.
8. Drs. Bill Mulligan and Larry Ramsay, from Saint John, New Brunswick, tour the exhibit area.
9. Dr. Bradley Holmes, a member of CDA's Board of Governors, found the ODA luncheon to his liking.
10. Dr. Lindsay Mussells, of Westmount, Québec, enjoyed the CDA past-presidents' breakfast.
11. Dr. Gilbert Utas, Past-President of CDA, and Dr. Robert Griffiths, of Charleston, Illinois, President of the ADA, compare notes.
12. Mrs. Kathy Schiewe, wife of Dr. Robert Schiewe, ODA President, received a pin from Dr. N.A. Mancini, Chairman of CDA's Board of Governors, at the ODA luncheon.
13. Seated at one of the tables reserved for special guests at the CDA luncheon, were, left to right: Alfred Scales, President-Elect of the Canadian Pharmaceutical Association; Dr. Ted Ramage, chairman of the 1983 CDA Convention in Vancouver; Dr. Leon Richard, President of the Canadian Medical Association; Mrs. Pierrette Laporte, and Dr. Jean-Guy Landry, President of l'Ordre des dentistes du Québec.
14. Dr. James Guest, Chairman of the Canadian Fund for Dental Education, tours the exhibit area.
15. Chatting before the CDA luncheon are, Dr. Jean Laporte and his wife, Pierrette, from Québec City; Dr. Robert Hicks of West Vancouver and Dr. Ralph Crawford of Winnipeg.
16. Enjoying a brief chat while touring the exhibit area are Dr. Donald E. Williams, CDA President; Brig.-Gen. W.R. Thompson, President-Elect, and Lynn Tomkins, a former CDA student representative on the Board of Governors.
17. Enjoying a respite between events in the busy round of Convention activities are Mrs. Elaine MacKay of Saskatoon, Dr. D.L. Thompson of Calgary, a member of CDA's Board of Governors, and Mrs. Tess Williams, of Moncton.
18. The 12th Canadian Student Table Clinic Program was held in conjunction with the CDA/ODA Convention. Participants and sponsors of the program posed for this group photo. They are, first row, left to right: Christopher J. Wojcicki, McGill University; CDA President Dr. Donald E. Williams; Randy Masuda, University of Western Ontario; Mr. Henry Thornton, chairman and chief executive officer of Dentsply International; Aloysius Tong, University of British Columbia. Second row: David Hastings and David McLeod, University of Saskatchewan; Michel Côté, Université de Laval; Ralph Pisko-Dubienski, University of Alberta and Graham Opie, Dalhousie University.
19. Dr. Leon Richard, President of the Canadian Medical Association, enjoying his breakfast.





1. Le Dr Donald E. Williams, président de l'ADC, et le Dr George Stirling, président du congrès ADC/ADO s'en contaient de bonnes.
2. À la table d'honneur du congrès de l'ADC, de gauche à droite: les Drs R.D. Sexton, John MacKay, Gilbert Utas, ancien président de l'ADC, J. Bruce Taylor et Donald E. Williams, président de l'ADC.
3. Au poste de renseignements de l'ADC, Kathy Mactaggart, employée permanente, était prête à répondre aux questions.
4. Le "Capitaine George Vancouver", alias le Dr Ted Ramage, vêtu de ses plus beaux atours, a fait une visite surprise au déjeuner de l'ADC pour inviter ses collègues au congrès de 1983.
5. Hubert Drouin, directeur général de l'ADC, présente des roses à Mmes Elaine MacKay, Doris Thompson, Tess Williams et Aileen Taylor.
6. Mme Aileen Durham, organisatrice du congrès pour l'ADO, qui s'est empressée de résoudre les problèmes de chacun.
7. Cyril Gallant et Esme Spilar, du CDSPI, expliquent le régime d'assurance à un dentiste.
8. Les Drs Bill Mulligan et Larry Ramsay, de Saint-Jean (Nouveau-Brunswick), visitent l'exposition.
9. Le Dr Bradley Homes, gouverneur de l'ADC lors du déjeuner de l'ADO.
10. Le Dr Lindsay Mussells, de Westmount (Québec), au déjeuner des anciens présidents de l'ADC.
11. Les Drs Gilbert Utas, ancien président de l'ADC, et Robert Griffiths, de Charleston (Illinois), président l'ADA, s'échangent des notes.
12. Mme Kathy Schiewe, épouse du Dr Robert Schiewe, président de l'ADO, reçoit une épinglette du Dr. N.A. Mancini, président du Bureau des gouverneurs de l'ADC.
13. Un groupe d'invités spéciaux au déjeuner de l'ADC, de gauche à droite: Alfred Scales, président élu de l'Association pharmaceutique canadienne; le Dr Ted Ramage, président du congrès de 1983 qui aura lieu à Vancouver; le Dr Léon Richard, président de l'Association médicale canadienne; Mme Pierrette Laporte; le Dr Jean-Guy Landry, président de l'Ordre des dentistes du Québec.
14. Le Dr James Guest, ancien président du Fonds canadien pour l'enseignement dentaire, visite l'exposition.
15. Échangeant quelques mots avant le déjeuner de l'ADA, le Dr Jean Laporte et son épouse Pierrette, de Québec, le Dr Robert Hicks, de Vancouver-Ouest, et le Dr Ralph Crawford, de Winnipeg.
16. Le Dr Donald E. Williams, président de l'ADC, le brigadier-général W.R. Thompson, président élu, et Lynn Tomkins, ancienne représentante des étudiants au Bureau des gouverneurs de l'ADC, échangeant leurs impressions en visitant l'exposition.
17. Mme Elaine MacKay, de Saskatoon, le Dr D.L. Thompson, de Calgary, gouverneur de l'ADC, et Mme Tess Williams, de Moncton (N.-B.), prennent un moment de répit entre les multiples activités du congrès.
18. La 12^e Clinique de table des étudiants canadiens s'est déroulée en même temps que le congrès de l'ADC et de l'ADO. La photo montre dans l'ordre habituel participants et donateurs. Première rangée: Christopher J. Wojcicki, Université McGill; le Dr Donald E. Williams, président de l'ADC; Randy Masuda, Université Western Ontario; M. Henry Thornton, président-directeur général de Dentsply International; Aloysius Tong, Université de Colombie-Britannique. Deuxième rangée: David Hastings et David McLeod, Université de Saskatchewan; Michel Côté, Université Laval; Ralph Pisko-Dubienski, Université de l'Alberta; Graham Opie, Université Dalhousie.
19. Le Dr Léon Richard, président de l'Association médicale canadienne, au petit-déjeuner.

'Common sense' will avoid legal action after CPR treatment

If professionals trained in cardiopulmonary resuscitation use common sense in emergency situations, keep up-to-date in procedure in this modality, and keep accurate, detailed written records, they should be able to avoid legal action.

This advice was given by Dr. Gary E. Pitkin, an Ontario governor representative to the Canadian Dental Association, at a clinic at the CDA/ODA Convention in Toronto.

Although no medical-legal problems have arisen as yet in Canada, Dr. Pitkin believes that with the growing number of people being trained in CPR technique, it is only a matter of time before such an incident will occur.

Dentists could face, in the realm of civil law, a charge of breach of a duty, a "tort", which is the right of action when an alleged wrong has been done. This could be an intentional wrong, for example, when a patient insists the wrong tooth has been extracted, or an unintentional charge of civil negligence, where a situation could have been controlled if the practitioner had been more careful. The fundamental rule of law, Dr. Pitkin said, is the duty to take care not to expose a patient to risk or bodily harm.

He advised that for ensured liability protection, regardless of the type of action taken against the dentist, that "you make sure to notify the insurer if you suspect there may be a claim against you for malpractice, etc. Otherwise, you may wind up with no insurance."

He urged those trained in CPR techniques to "do what is best for the victim. Use common sense. If untrained, you should do something. Anything is better than nothing, as long as you don't make matters worse, especially when treating a pulseless, non-breathing individual. If you are trained, the law will expect more of you."

Defensive record writing

Dr. Pitkin advised that if a dentist must appear in court and his records are introduced as evidence, "good notes may save you. No notes will destroy you.

"Take care writing notes," he urged. "Give some attention to detail. Hemingway did when he was writing fiction." Some of the best medical care can be discredited by sloppy, illegible or scanty notes introduced into the public record.

Such notes will show that "you did the things a good rescuer would, under the circumstances," Dr. Pitkin said. And, he added, they should not reflect a negative attitude. They should reflect that the professional was a "caring person with compassion for his fellow-man." The notes should report that it was "this pleasant, elderly woman, rather than an old lady. Good PR is very important."

Good Samaritan laws

Good Samaritan laws are being discussed in many parts of Canada and the United States these days, and they have advantages and disadvantages, Dr. Pitkin feels.

This law will protect a person if he has a lawsuit as a result of an unsuccessful attempt to revive a person through CPR.

On the other hand, he said, if there is such a law, it will result in a codification of law, into which "too much detail is written. Everything is defined." But, if some circumstance is left out, Dr. Pitkin warned, then "there's no legal protection."

He said he was not in favor of a "hard and fast Good Samaritan law." He believed that common sense, the Golden Rule, and morality, should prevail.

A Good Samaritan law has existed in Manitoba since 1972, in Newfoundland since 1971 and Saskatchewan since 1976. There is no such law in Ontario yet, but Health Minister

Larry Grossman is presently considering one, Dr. Pitkin said.

The matter of CPR treatment "should be on a higher level than the law," he said. "It should be dealt with on a moral basis. Do you have the moral duty if you know how to do it? I think you have as a professional."

He also believed that when a person comes on a scene where people are administering CPR procedures incorrectly, that person should assess the situation and be "very assertive" if the rescuer is "doing a lot of harm." But, he said, "be sure you're right. If you're not, their lawyers will be driving Cadillacs."

If you perform CPR incorrectly, Dr. Pitkin warned, a blanket "shot-gun method of litigation" could follow. Not only the rescuer, but "the person who trained you, and even some witnesses," can be involved.

Comparing figures compiled in the earliest era of CPR instruction, in the 1960's, with those of the 1980's, Dr. Pitkin noted that in-hospital deaths from cardiac incidents had dropped from 50 per cent to about 20 per cent. Sixty per cent of the victims died before arrival at the hospital. CPR training has reduced this figure by about 30 per cent in the latest recorded period. In a city the size of Toronto, this means as many as 300 can be saved in a year, he said.

To avoid the possibility of harming the patient and risking lawsuits, he urged those with CPR training to learn all the latest methods and become recertified.

He hoped that the legal tenet of "res, ipse loquator," or "use common sense in the circumstances," will continue to prevail. He feared that when the first writ against a CPR rescuer is served, "the whole system could collapse. People don't want to get involved in potentially hazardous legal actions," he said.

Answer to nursing bottle syndrome problem 'brutally simple' — Dr. Kenny

Nursing bottle syndrome, the popular phrase coined for dental decay of the primary dentition, can be prevented. It is just a matter of education of the parent by the dental profession.

Dr. David Kenny, speaking at a clinic at the 51st Annual Convention of the Ontario Dental Nurses and Assistants Association in Toronto in May, said the answer to the problem "is so brutally simple, good oral hygiene from the moment the teeth appear in the mouth."

Dentist-in-Chief at the Hospital for Sick Children in Toronto, Dr. Kenny has been studying the syndrome in children admitted for dental treatment to the Toronto hospital and the Children's Hospital of Eastern Ontario in Ottawa where Dr. Kenny was Chief of Dentistry from 1977-81. He intends to publish the results of this study next year.

Nursing bottle decay occurs when the enamel is dissolved by the constant production of acid on the teeth. Acid is formed every time sugar enters the mouth and mixes with the bacteria. Any sweetened drink in a bottle such as soft drinks, juices, powdered drinks, fruit drinks, milk and other concoctions will form acid in the mouth. All these supplements, Dr. Kenny said, are particularly cariogenic.

Putting the child to bed with a bottle filled with any liquid other than water compounds the problem, he said. The acid from the drink washes continually over the baby teeth, which are more easily dissolved by acid than adult teeth.

Recognition of this problem of nursing bottle caries by the dental profession has become widespread only in the past 20 years. During this period it has been reported by various investigators, several of whom have disagreed with each other. All have failed to discuss satisfactorily the

presence of a nursing bottle caries "pattern," Dr. Kenny said.

With the help of Dale Scanlan, a hygienist with the Division of Dentistry, Children's Hospital of Eastern Ontario, Dr. Kenny began studying nursing bottle syndrome in the patients who were admitted to the hospital for dental treatment in 1978. Two distinct patterns were discovered as a result of this study.

Dr. Kenny found many children exhibited the typical nursing bottle pattern where the incisal edges of the teeth become brown or black and dissolve as the teeth erupt. And they also exhibited the snacking decay pattern. Once erupted, the teeth become secondarily involved in decay, he said.

"Nursing bottle decay and snacking decay are two separate entities, but they often occur together," Dr. Kenny said.

Dr. Kenny and Dale Scanlan studied 115 cases of rampant dental decay in children between the ages of one and three-and-one-half years. They conducted a detailed diet analysis on 83 of these cases, of whom 24 per cent were breast-fed babies.

The incisors in the children over two-and-one-half years old "were often in such bad shape that they could not be saved," Dr. Kenny said.

Also, it was discovered that factors other than breast-feeding contributed to the dental decay of the children who had been breast-fed.

"All the breast-fed children who presented with rampant decay had some form of supplementary feeding. This says that something else is behind the decay here," Dr. Kenny said.

"In this study as well as in clinical practice, we have not yet examined one breast-fed child with rampant caries of the nursing bottle pattern that did not have a supplement to its

diet that was cariogenic by virtue of its composition and/or length of application.

"We have not yet had a documented case where a child who was only breast-fed had tooth decay," he said.

'Snacking' compounds problems

Sucking on a bottle at nap and bedtime causes nursing bottle caries, but continual snacking throughout the day once the child has been weaned compounds the child's dental problems, Dr. Kenny warned.

Snacking may lead to excess calories, narrowed taste preferences and risk of diabetes, hypertension and heart attack as well as dental decay.

Delaying treatment will cause problems for the permanent teeth.

"The real problem is the non-treatment of dental caries in the primary dentition. As long as you leave the decayed teeth in the mouth you are going to continue to have problems with abscesses, enamel hypoplasia, orthodontic problems or aberrant microbial ecology," he warned.

The child, therefore, is more susceptible to tooth decay as he gets older.

Education is the key to preventing "this mess," Dr. Kenny said.

"Ignorance is not a sin, stupidity is. The parents may not know so give them the benefit of the doubt. You have to treat them with velvet gloves because they may decide not to seek treatment for their child if they feel guilty. And it's the child who suffers."

Dr. Kenny said the dental profession has to educate the parents in prenatal and postnatal classes, in schools and at the dentist's office. The answer, he said, is not treatment after decay is discovered, but prevention of decay before it starts.

Briefly —

In order to prevent convention-crashers from attending CDA/ODA Convention events at the Sheraton Centre in Toronto, May 9 — 12, security personnel were checking credentials at the top of escalators leading to the hotel's Grand Ballroom.

Dr. Donald E. Williams, president of the CDA, was personally assured that the precaution was very effective.

Rushing to an engagement in the area of the ballroom, Dr. Williams was halted by two uniformed security people and asked for identification. After a few seconds of pocket-searching, an embarrassed Dr. Williams was unable to come up with any Convention identification.

In desperation, he told the security people, "I'm *just* the president of CDA."

At this point the security guards relented, and, amid a profusion of apologies, allowed Dr. Williams to proceed.

The intended closing of the Kelsey Institute's dental assistant training course in Saskatoon, Saskatchewan, was reversed by the Saskatchewan government in early April after a wave of opposition from parents, dentists and other groups in northern Saskatchewan.

When the government made the earlier announcement it would close, there was a fear it would lead to a shortage of dental assistants in the northern part of that province. Most of the students in the course are from northern communities, and in briefs submitted, were opposed to resuming studies at Regina's Wascana Institute.

Dr. Robert Hicks, a past-president of the College of Dental Surgeons of B.C. and a member of the CDA Board of Governors and Executive Council, was elected President of the Canadian Association of Orthodontists at the May annual meeting in Toronto.

A graduate from the University of Alberta with a DDS in 1962 and a MSc with specialty in orthodontics in 1967, Dr. Hicks retains the presidency until September, 1983.



Dr. Robert Hicks

Serving on the executive with him are: past-president Dr. Jack Dale; Dr. Frank Shamy, president-elect; Dr. Jean-Louis Ayres, secretary-treasurer; Dr. Ian Milne, vice-president.

After many years as a practising dentist in Ste. Foy, Quebec and faced with the possibility of never practising again, after major surgery, Dr. Yves Poulin decided to return to university. At the age of 40, he entered the Master of Business Administration course at Laval University.

Now the 44-year-old Ste. Foy resident is reaping the rewards.

He still operates his dental practice part-time and lectures occasionally at Laval University. But for the remainder of his time, he acts as a consultant in business administration for dentists.

Dr. Poulin has been engaged recently by Laval University organizing an undergraduate course in dental business management which must be taken after the student has successfully completed a course in organized dentistry and ethics.

"A dentist's business is like any other small business," Dr. Poulin said.

The dentist has to consider marketing, production, finance and accountability if he wants to be successful. His

office has to be well managed.

"There is no place for simplicity. A dentist can't just be hand skilled anymore. He has to be versed in other matters," he said. "To operate a dentist office is big business right now."

A dentistry graduate from the University of Montreal in 1962, Dr. Poulin hopes the Canadian dental schools will address themselves to this current state of affairs and offer management courses that will be valuable tools for the graduating dentist.

After all, he said, students graduating these days can expect an initial outlay of more than \$50,000 to start up their own practices.

Dr. Poulin would like to begin lecturing on business management to dentists across Canada within the next two years.

The free, universal dental care program promised in Saskatchewan last March, expired along with the Blakey NDP government on April 26.

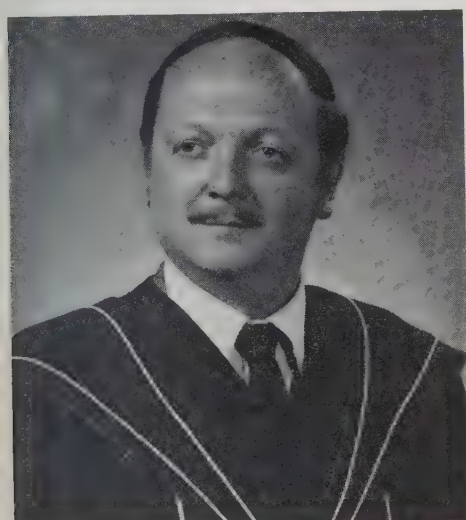
A new health minister was recently named — Graham Taylor — and dentists in Saskatchewan lost no time in approaching him. Mr. Taylor, who has expressed interest in the concerns, problems and aspirations of dentists, was invited to speak at the Saskatchewan College of Dental Surgeons Convention, June 10 — 12. He accepted the invitation, said Dr. George Peacock, secretary-treasurer and registrar of the College of Dental Surgeons of Saskatchewan.

Mrs. Linda Strevens has been appointed Executive Assistant of the Royal College of Dental Surgeons of Ontario, effective August 30, 1982.

She graduated from the University of Toronto with a diploma in dental hygiene in 1973, followed by a BScD in 1979. Since then, Mrs. Strevens has been a tutor at the university.

She has assisted the College by serving as an examiner at dental hygiene licensing examinations and helped upgrade courses in orthodontic duties conducted by the College.

Dr. Gordon W. Thompson, dean of the Faculty of Dentistry at the University of Alberta, has recently been elected President of the Association of Canadian Faculties of Dentistry. Dr. Thompson is a graduate of the University of Alberta where he received his DDS in 1965. His other credentials include an MScD and a PhD in statistics from the University of Toronto. In addition, Dr. Thompson is a Fellow of both the Royal College of Dentists in Canada and the International College of Dentists.



Dr. Gordon Thompson

His term as President began this month when he was installed at a meeting in Halifax. He takes over from Dr. Ralph Barolet, a professor at Laval University.

Elected with Dr. Thompson was Dr. Arthur Schwartz as vice-president/treasurer. Dr. Schwartz is dean of the Faculty of Dentistry at the University of Manitoba.

Dentists in British Columbia will receive an average increase of about 12 per cent in 1982, thanks to a tentative agreement between the provincial government and the B.C. College of Dental Surgeons.

The increase is lower than last year's award of 12.6 per cent and was retroactive to April 1, 1982.

The agreement is for a fee schedule for the Dental Care Plan of the B.C. Ministry of Health.

At the recent annual meeting of the Canadian Academy of Pedodontics, Dean Ian Bennett of Dalhousie University Faculty of Dentistry was named president for 1982-83.

Past president is Dr. W. Simpson of the University of Alberta Faculty of Dentistry, the president-elect is Dr. J. Derbyshire, of Calgary, and the secretary-treasurer is Dr. Franklin Pulver of Toronto.

Ontario's new Healing Arts Radiation Protection Act stipulates that anyone who administers x-rays in dental offices must have completed successfully an approved course in x-ray safety.

This ruling comes into effect on January 1, 1984 or a later date set by the Ontario health minister.

X-ray safety courses will be available through community colleges in Ontario. Each dental office will be notified by the Ministry of Health when the courses will be held.

For one and a half years, members of the Society of Dentistry '82, including all students of the graduating dental class from the University of Alberta, have been raising funds to improve dental facilities for the geriatric and disabled persons of Edmonton.

Their proudest day dawned on May 5.

They had raised a total \$27,817.16 which enabled them to donate an Orthopan 5 and a portable dental unit for the Geriatric Teaching Unit, Youville Memorial Wing, of Edmonton General Hospital. The funds also paid for a fully-equipped mobile dental facility for the Rosecrest Home, a hospital for disabled children in Edmonton. This included a portable unit, compressor, light, and mobile cart.

The Orthopan will allow dental radiographs to be taken extra-orally, and one exposure will pan the entire area, thus resulting in less radiation

exposure to the patient. The portable dental units will also be very instrumental in providing services to bedridden patients.

The presentation took place in the main auditorium of the Edmonton General Hospital, 11111 Jasper Avenue, Edmonton, Alberta.

Dignitaries on hand for the occasion included: Hon. D. Russell, Alberta's Minister of Hospitals and Medical Care; Prof. L.C. Leitch, Vice-President (finance and administration), University of Alberta; Dr. G.W. Thompson, Dean of the Faculty of Dentistry; Dr. S. Greenhill, Youville Wing, Edmonton General Hospital; Mrs. M. Toner, Director of Resident Care, Rosecrest Home, and members of the Society of Dentistry '82.

Dr. Marvin Kay, a Toronto anesthesiologist and coin collector, who administers general anesthetics in dental offices, recently devised a unique way to mark a career milestone.

He has issued a medal to observe the administration of 10,000 general anesthetics.

Dr. Kay, a graduate of the University of Toronto Faculty of Medicine, has been a serious numismatist for more than 40 years, and is a full-time anesthesiologist.

About 15 years ago, he began a part-time practice administering anesthetics in dental offices. There was such a demand for his services that he became a full-time travelling anesthesiologist.

In February, he achieved the milestone which prompted the medal idea — his 10,000th dental office anesthetic, which is believed to be a record in Canada, and possibly, on this continent.

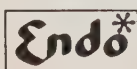
On one side of the 2½-inch medal is the wording "Marvin Kay, M.D. Toronto/Canada," within a wreath of maple leaves. On the other side is the purpose of the souvenir: "10,000 General Anesthetics Performed in Dentists' Offices/February, 1982."



Gripped by acute pain

Percocet's potent analgesic quickly relieves moderate to moderately severe dental pain, usually within 15-30 minutes.¹ The unique combination of acetaminophen and oxycodone provides lasting relief for up to six hours.

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INDICATIONS: Relief of moderate to moderately severe pain (Percocet), or relief of mild to moderate pain (Percocet-Demi), with or without fever, especially in patients who are allergic to acetylsalicylic acid or for whom acetylsalicylic acid is contraindicated.

CONTRAINDICATIONS: Status asthmaticus, pre-existing respiratory depression or convulsive states, hypersensitivity to oxycodone, acetaminophen, or caffeine. Unlike acetylsalicylic acid, acetaminophen is not contraindicated in patients with peptic ulcer or gout.

WARNINGS: Oxycodone can produce drug dependence of the morphine type and has the potential for being abused. Psychic dependence, physical dependence and tolerance may develop upon repeated administration, as with other oral narcotic medication. May impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as driving a car or operating machinery. Patients should be cautioned accordingly. Additive CNS depression may occur in patients receiving other narcotic analgesics, general anesthetics, monoamine oxidase inhibitors, tricyclic antidepressants, phenothiazines or other tranquilizers, sedative-hypnotics or alcohol. If combined therapy is contemplated, the dose of one or more of the agents should be reduced. Safe use in pregnancy has not been established relative to possible adverse effects on fetal development, therefore Percocet or Percocet-Demi should not be used in pregnant women unless, in the judgment of the physician, the potential benefits outweigh the possible hazards. The administration of Percocet or Percocet-Demi to obstetrical patients in labor may be associated with respiratory depression of the newborn. Percocet should not be administered to infants or children, although Percocet-Demi may be considered for children of six years or older.

PRECAUTIONS: The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of **head injury**, other intracranial lesions or a pre-existing elevated intracranial pressure. The diagnosis or clinical course in patients with **head injuries** or with **acute abdominal conditions** may be obscured by narcotic drugs. Give cautiously to **elderly or debilitated** patients due to the risk of cardiac or respiratory depression, as well as to patients with hemorrhage, severe impairment of hepatic, respiratory or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture. Narcotic analgesics should only be employed for the treatment of **headaches** when no other treatment is effective, in order to minimize risk of psychological and physical dependence.

ADVERSE REACTIONS: Light-headedness, dizziness, sedation, nausea and vomiting may occur, as well as euphoria, dysphoria, constipation and pruritus.

DRUG INTERACTIONS: May be additive with other CNS depressants.

MANAGEMENT OF OVERDOSAGE: Signs and symptoms: Respiratory depression, extreme somnolence progressing to stupor or coma, skeletal muscle flaccidity, cold and clammy skin, and sometimes bradycardia and hypotension. In severe cases, apnea, circulatory collapse, cardiac arrest and death may occur. Acute acetaminophen intoxication is characterized by anorexia, nausea, vomiting and sweating within two or three hours of ingestion, and possibly cyanosis with methemoglobinemia, enlargement and tenderness of liver, accompanied by abnormally high liver function tests, occur within 48 hours, followed by jaundice, coagulation defects, myocardiopathy, encephalopathy, renal failure and death due to hepatic necrosis. A dose of 10 g of acetaminophen is intoxicating, possibly fatal in excess of 15 g. Hepatic toxicity occurs when the plasma levels reach 300 µg/ml within four hours of ingestion. **Treatment:** Re-establish adequate respiratory exchange. Naloxone, nalorphine or levallorphan are specific antidotes against narcotic-induced respiratory depression. An appropriate dose of antagonist should be administered preferably intravenously, and repeated as needed to maintain adequate respiration; the patient should be kept under continued surveillance. Instructions in the package insert provided by the manufacturer should be carefully followed. Do not administer an antagonist in the absence of clinically significant respiratory or cardiovascular depression. Employ oxygen, intravenous fluids, vasopressors and other supportive measures as indicated. Gastric emptying by emesis or lavage may be helpful. Hemodialysis carried out within ten hours of ingestion may be of some value. Plasma levels of acetaminophen should be determined.

DOSAGE AND ADMINISTRATION: Percocet Tablets: Usual adult dose is one tablet every six hours as needed for pain.

Percocet-Demi Tablets: Usual adult dose is one or two tablets every six hours. Children twelve years and older: half a tablet every six hours. Children six to twelve years: a quarter of a tablet every six hours. Not indicated for children under six years of age. Dosage should be adjusted according to the severity of the pain and the patient's response.

DOSAGE FORMS: Percocet Tablets: Bottles of 40, 100 and 500 white, scored tablets, each containing oxycodone hydrochloride 4.5 mg, oxycodone terephthalate 0.38 mg, acetaminophen 325 mg, caffeine 32 mg.

Percocet-Demi Tablets: Bottles of 40, 100 and 500 blue quadrisected tablets, each containing oxycodone hydrochloride 2.25 mg, oxycodone terephthalate 0.19 mg acetaminophen 325 mg, caffeine 32 mg.

Complete prescribing information available on request.

Reference

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MEPUB 14

PMAC

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CANADIAN DENTAL HYGIENISTS NEW EXECUTIVE



New executive members of the Canadian Dental Hygienists' Association met with CDA's Management Committee during the CDA/ODA joint Convention in Toronto in May. Seated left to right, are: Mrs. Linda Berry of Mississauga, Ont., President; Dr. Donald E. Williams, CDA President; Mrs. Patricia Grant, of Halifax, Past-President, and Mrs. Peggy Knill of Hamilton, Ont., Secretary. Standing are: Dr. Gilbert Utas, Past-President of the CDA; and Brigadier General W.R. Thompson, President-Elect of CDA. Not present for the photograph was Judi Rogers, of Mississauga, Ont., Treasurer.

Obituaries/ Nécrologies

BRIEN, J. André: Décédé le 22 avril 1982 à l'âge de 88. Gradué Université de Montréal, 1919.

HICKS, Kenneth W.: Dr. Hicks of Kailu, Hawaii was born in 1933. He graduated from the University of California's School of Dentistry in 1959 and was a member of ADA.

LEE, Edward A.: April 16, 1982. Dr. Edward Lee was born in 1904 and raised in Trinidad where he practised for several

years. A CDA member, Dr. Lee practised dentistry in both Terrebonne and Winnipeg, Manitoba.

STILES, D.C.: July 29, 1981. Dr. Stiles of London, Ontario was an oral surgeon. Born in 1917, he graduated from the University of Toronto in 1941.

WOODS, W.G.: Dr. Woods of Toronto was born in 1912 and graduated from the Faculty of Dentistry, University of Toronto in 1936. He was a life member of the CDA.

FLUORINSE®

(Sodium fluoride oral solution)

COMPOSITION: Contains sodium fluoride in a pleasantly flavoured solution at neutral pH. Contains alcohol (3% by volume).

INDICATIONS: Dental caries prophylactic

PRECAUTIONS: For buccal administration only.

DO NOT SWALLOW

Swallowing of solution may cause nausea. Usage in excess of recommended dosage may cause dental fluorosis.

DIRECTIONS: Swish vigorously in the mouth for approximately 1 to 2 minutes (preferably at bedtime after brushing and flossing teeth thoroughly) 1 to 2 teaspoonsful (5 to 10 ml) of FLUORINSE.

Expectorate, DO NOT SWALLOW. For maximum benefit, do not eat or drink for a period of 30 minutes after rinsing.

Weekly Rinse	Daily Rinse	Weekly Rinse
Cinnamon (red) 0.2% sodium fluoride	Ice Mint (blue) 0.5% sodium fluoride	Mint (green) 0.2% sodium fluoride

HOW SUPPLIED: Fluorinse is available in 450 ml plastic bottles with child-resistant caps.

CAUTION: Keep out of reach of children.

FLOZENGES®

(Sodium fluoride tablets)

COMPOSITION: Contains sodium fluoride in lozenge form. Contains no sugar, saccharin or cyclamate.

INDICATIONS: Dental caries prophylactic for buccal and systemic administration.

PRECAUTIONS: If this product is used in an area where the drinking water has a natural fluorine content in excess of 0.7 parts of fluoride ion per million parts of water, or is artificially fluoridated, fluorosis of the tooth enamel may result.

CONTRAINDICATIONS: Sodium-free diets

RECOMMENDED DOSAGES SCHEDULE:

Age	Concentration of fluorine in drinking water (p.p.m.)		
	<0.3	0.3-0.7	>0.7
2 weeks to 2 years	0.25 mg daily (½ orange tablet)	0 mg daily	0 mg daily
2 to 3 years	0.5 mg daily (1 orange tablet)	0.25 mg daily (½ orange tablet)	0 mg daily
3 to 16 years	1.00 mg daily (1 strawberry tablet)	0.5 mg daily (½ strawberry tablet)	0 mg daily

After brushing the teeth allow the tablet to dissolve slowly in the mouth and swallow the resultant liquid. Initially, for infants, the tablet can be dissolved in juice or crushed in food. However, once teeth have erupted the infant should be encouraged first to chew and eventually, when older, to suck the tablets as described above.

HOW SUPPLIED: Flozenges are available in plastic child-resistant containers of 120 lozenges.

Two Flavours:

Orange	Strawberry
0.5 mg of fluoride ion	1.0 mg of fluoride ion

CAUTION: Keep out of reach of children. Exceeding recommended dosage over a prolonged period of time may be harmful.

Available in pharmacies only.

Full information on request.



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CDA Resource Centre/Le Centre de documentation

COMPUTERS IN DENTAL PRACTICE

Copies of the following articles are available at no charge from the library. Original abstracts which were included with the references are provided below. Part of this bibliography was generated with the help of MEDLARS, a computerized information retrieval system for the health sciences field, which has been operational at the library since February 1982, and is at the disposal of all members.

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LES ORDINATEURS POUR LES DENTISTES

On peut se procurer sans frais à la bibliothèque le texte des articles ci-dessous. Le cas échéant, nous avons repris le résumé qui accompagnait la référence. Cette bibliographie a été dressée, en partie, grâce à MEDLARS, un système automatisé de recherche documentaire sur les sciences de la santé, que la bibliothèque exploite depuis le mois de février 1982, et qu'elle met au service de tous les membres.

- fees, expenses, collection efficiency, and productivity without the expense and inconvenience of using a computer service. Computers should be reserved for more challenging tasks."
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Un vaccin contre l'hépatite virale B pour tous les sujets à risque élevé sera disponible dès l'automne

L'automne prochain, on disposera d'une assez grande quantité de vaccins contre l'hépatite virale B, l'une des plus sérieuses maladies qui se rencontrent dans les cabinets dentaires, pour immuniser tous les sujets canadiens présentant des risques élevés.

Le président du Collège royal des dentistes du Canada, le Dr James H.P. Main, a appris à la rédaction du Journal que le vaccin sera disponible "en quantité beaucoup plus grande que prévue à l'origine."

S'adressant à un auditoire qui s'est réuni à l'occasion du Congrès de l'ADC et de l'ADO à Toronto, le Dr Main a déclaré que le vaccin, mis au point et produit aux États-Unis, aurait probablement été administré suivant les besoins prioritaires parce qu'alors, on croyait pouvoir disposer seulement d'une quantité restreinte.

À cause de cette situation, a-t-il expliqué, les ministres provinciaux de la Santé ont recommandé la création de comités consultatifs pour déterminer les priorités. En Ontario, ce fut le Dr James Rankin qui présidait le comité dont l'existence n'était officielle qu'à demi.

Les groupes les plus susceptibles d'être contaminés comprennent les chirurgiens buccaux, les pédodontistes, les endodontistes, les dentistes qui travaillent dans les hôpitaux, les établissements psychiatriques et les prisons, ainsi que leurs assistantes dentaires.

Parce qu'il s'agit d'un vaccin à base de sérum humain fabriqué avec du sang fourni par des bénévoles, on ne le produit pas encore en grande quantité et le coût en est "assez élevé," de dire le Dr Main. L'immunisation exige trois injections par personne, ce qui représente une somme d'environ 160\$.

Parmi les personnes qui n'appartiennent pas au milieu dentaire et qui auront priorité, on range les familles dont un membre ou plus sont porteurs

du virus ou souffrent d'hépatite; les patients atteints d'autres maladies, telle l'hémophilie, qui les rendent sujets à l'hépatite; le personnel qui administre des soins de santé, y compris les techniciens chargés des transfusions sanguines, les infirmières travaillant dans les services de dialyse et tous les chirurgiens; les pensionnaires des établissements psychiatriques et des prisons; les homosexuels et les prostituées.

Le vaccin sera donné aux malades mentaux et aux prisonniers parce qu'ils "ne peuvent rien faire pour l'obtenir sur le marché libre," a commenté le Dr Main. Quant aux homosexuels et aux prostituées, ils constituent un groupe social qui répand l'infection et

qui peut transmettre la maladie à de nombreuses personnes.

Justement, le premier groupe de donateurs de sang bénévoles qui a aidé à la mise au point et à la fabrication du vaccin, se composait principalement d'homosexuels habitant New York. Parmi eux, l'incidence de l'hépatite virale B est très élevée.

Le Dr Main avait exprimé l'espoir que, dans un avenir assez rapproché, il y aurait suffisamment de vaccins pour immuniser "tous les membres de la profession dentaire" au Canada. Il semble maintenant que tous les dentistes et leurs assistantes pourront, s'ils le désirent, recevoir le vaccin dès l'automne prochain alors qu'il sera disponible en grande quantité.

L'ADA rend hommage



Le Dr Robert Griffiths, président de l'ADA, a remis à l'ADC une marque tangible de son appréciation pour la collaboration entre les deux organismes. Le Dr Donald E. Williams, président canadien, a accueilli le geste au nom de son association.

L'Association dentaire américaine a présenté un bol en argent gravé au président de l'ADC, le Dr Donald E. Williams, lors du Congrès de l'ADC qui a eu lieu à Toronto, le 11 mai dernier.

L'ADA a voulu souligner ainsi "les années de collaboration avec l'Association dentaire canadienne."

C'est le président de l'ADA, le Dr Robert Griffiths, de Charles, Illinois, qui a fait la présentation.

L'ADA "se sent très près de l'ADC," a remarqué le Dr Griffiths, et, au cours des ans, la collaboration entre les deux associations s'est améliorée.

"Je suis reconnaissant envers l'ADC," a-t-il poursuivi. "Vous avez collaboré de bonne grâce avec nous et, pour nous aider dans tous nos projets, vous avez été toujours prêts. Nous éprouvons pour vous la plus haute estime qui soit."

Le nouveau complexe de l'Université Laval double l'espace de son École dentaire



Le nouveau pavillon, phase 2, de la Faculté de médecine dentaire de l'Université Laval, qui a coûté six millions de dollars, a été inauguré le 29 avril.

Le 29 avril dernier, à Ste-Foy, Québec, l'Université Laval inaugurait un nouveau complexe de six millions de dollars composé de trois modules et destiné à l'École de médecine dentaire.

L'école existe déjà depuis onze ans. Commencée en 1980, la deuxième phase du programme de construction double son espace fonctionnel, le faisant passer de 45 à 90 mille pieds carrés. Eventuellement, l'école devrait former 50 étudiants dentaires par an.

Le recteur de l'Université Laval, M. Jean-Guy Paquet, a présidé l'inauguration. Il était entouré de M. Denis Lawson, représentant de Santé et Bien-être social Canada; de M. Denis Lazure, ministre québécois du Développement social; du Dr Roland Vallée, directeur de l'école; et de représentants de l'ADC dont le président, le Dr Donald E. Williams, et le directeur général, M. Hubert Drouin. Parmi les représentants de l'Ordre des

dentistes du Québec, on remarquait le Dr Jean-Guy Landry, président, le Dr Pierre Y. Lamarche, directeur général, et le Dr Charles E. Gosselin, registraire. Les invités d'honneur comprenaient le Dr Y. Giguère, représentant de l'ACDQ et le Dr L. Bernier, de Sillery, Québec, président de l'ADC en 1971.

Le module A du nouveau complexe constitue la partie ouest de la nouvelle école et contient, au premier niveau, quelque 10 000 pieds carrés consacrés à des laboratoires de recherche. On y trouve également une salle à environnement contrôlé et un autoclave géant. Le deuxième étage est réservé aux étudiants des première et deuxième années. On y a aménagé deux immenses laboratoires pré-cliniques pouvant recevoir 55 étudiants chacun.

Le premier étage du module B abrite les bureaux d'administration de l'école, tandis que le second loge les appareils audio-visuels et d'autres

pièces électroniques didactiques.

Le module C comprend cinq étages. On y trouve une cafétéria, une clinique chirurgicale comprenant huit salles et cabinets dentaires, chacun isolé de manière à empêcher la diffusion des radiations. Les bureaux de la Faculté occupent les étages supérieurs.

Inauguré en 1977, un ancien immeuble rénové durant la phase I du programme de construction est réservé principalement aux étudiants des troisième et quatrième années. On y trouve la clinique des professeurs et des locaux pour les diplômés.

Grâce à ce nouveau complexe, l'école sera en mesure de répondre aux besoins de l'Est du Québec en matière de recherche et d'enseignement jusqu'à l'an 2000, prévoit-on.

Depuis sa fondation, l'école compte 127 diplômés. Ceux-ci travaillent partout au Québec, mais plus particulièrement dans l'Est de la province.

L'ADC remet trois distinctions



Le Dr Bruce Taylor

Le Dr J. Bruce Taylor, de London (Ontario), a été fait le 11 mai membre honoraire de l'Association dentaire canadienne, — la plus haute distinction de l'organisme qui tenait son congrès annuel à Toronto. Le Dr John Warren MacKay, de la Saskatchewan, et M. Henry Moser Thornton, de York (Pennsylvanie), ont reçu le prix pour services émérites.

Les distinctions leur ont été conférées au nom des membres par le président de l'Association, le Dr Donald E. Williams, de Moncton (N.-B.).

Le titre de membre honoraire est décerné aux personnes qui ont rendu des services exceptionnels dans l'un ou l'autre des domaines de la médecine dentaire, sur le plan national ou international.

Le Dr Taylor a été honoré pour son dévouement aux idéaux de l'ADC qu'il a servi pendant six ans (deux mandats à titre de trésorier, de 1969 à 1975), à titre de membre du Collège international des dentistes et de président de l'Association dentaire de l'Ontario (1966-1967). On a également fait mention de ses services dans le Corps dentaire royal canadien de



Le Dr. John Warren MacKay

l'armée et de la marine du pays, au cours de la Deuxième guerre mondiale.

Le prix pour services émérites est décerné aux personnes qui se sont signalées au service de l'ADC.

Le Dr MacKay

Le Dr MacKay a occupé divers postes au sein de l'ADC.

Il a été membre du Bureau des gouverneurs de 1976 à 1981 et siégé au Conseil exécutif de 1979 à 1981. Le Conseil des services dentaires et le Conseil des soins dentaires ont aussi bénéficié de ses conseils et de ses avis entre 1972 et 1976. Il a aussi présidé le comité des services dentaires au sein du Conseil des soins dentaires.

Diplômé de la faculté de médecine dentaire de l'Université de l'Alberta, le Dr MacKay a aussi servi de chef de file chez les dentistes de la Saskatchewan. C'est un ancien président et membre du conseil du Collège des chirurgiens dentistes de la Saskatchewan et il a été président et secrétaire de la Société dentaire de cette province.

Éducateur, il a enseigné pendant deux ans, à temps partiel, au collège



M. Henry M. Thornton

de dentisterie de l'Université de la Saskatchewan.

M. Henry M. Thornton

M. Thornton, une des rares personnes ne faisant pas partie de la profession à recevoir le prix pour services émérites, a donné un élan remarquable à l'appui et au financement de l'enseignement de la médecine dentaire.

Nouveau président du conseil d'administration et directeur général de *Dentsply International*, il a dirigé une importante campagne de financement pour l'enseignement de la profession, alors qu'il était président de l'*American Dental Trade Association*. D'autres appuis ont été apportés, sous sa direction, directement à l'enseignement et à la profession elle-même, sa société ayant parrainé le programme de clinique de table aux séances annuelles des associations dentaires canadienne, américaine et britannique.

Sa société a aussi été la première à verser des fonds pour constituer l'*American Fund for Dental Health* et elle a étendu son appui au Canada en rendant possible le financement du Fonds canadien pour l'enseignement de la médecine dentaire.

Assistance record au Congrès

Le printemps est la saison des fleurs et, cette année, à Toronto, ce fut aussi celle des dentistes.

En effet, du 9 au 12 mai dernier, le Congrès mixte de l'ADC et de l'ADO a enregistré une assistance record de 4 144 personnes, y compris les dentistes, leurs conjoints, leurs invités, les assistantes et les hygiénistes dentaires ainsi que les exposants.

Durant le congrès, on a compté en tout 103 compagnies exposant leurs produits dans 203 kiosques.

Le président du congrès, le Dr George Stirling, et son comité ont dû prendre des dispositions spéciales pour recevoir tous ces gens. Pour la plupart des activités sociales, il a fallu utiliser tout l'espace de la grande salle de bal.

Parmi les activités qui ont permis aux dentistes et aux membres de leurs familles de se rencontrer, mentionnons le "Funn Runn" (courses pour s'amuser), un récital par le vibraphoniste Peter Appleyard, un spectacle de la *Second City Revue*, des danses et des déjeuners.

Le moment principal du congrès a été la présentation des récompenses offertes par les Associations dentaires du Canada et de l'Ontario aux dentistes et aux personnes qui ont fait une contribution importante à la dentisterie au Canada.

Lors du déjeuner de l'ADC, le lundi 10 mai, le Dr Bruce Taylor a été nommé membre honoraire de l'ADC. Il s'agit de la plus haute distinction offerte par l'association.

De plus, l'ADC a décerné une récompense pour service émérite au Dr John MacKay et à M. Henry Thornton.

C'est le président de l'ADC, le Dr Donald E. Williams, qui a procédé à

la remise des récompenses.

Par ailleurs, l'ADO a remis la récompense *Barnabus Day* au Dr Roderick Moran, président de l'ADO en 1973-1974 et président de l'ADC en 1978-1979, et au Dr Ronald Kellen, président du Comité consultatif affecté à l'acquittement anticipé des frais dentaires.

La conférence en mémoire du Dr Grieve a été prononcée par le Dr Arthur T. Storey. Il a parlé des nouvelles optiques touchant l'occlusion et la malocclusion.

Parmi les autres conférenciers, il convient de mentionner les Drs Louis Ripa (l'élimination des caries chez les enfants), Charles Brodie-Brockwell (l'angle de mouvement buccal et la douleur causée par le dysfonctionnement des muscles faciaux), Joseph Druck (l'implant endo-osseux et l'implant sous-périoste) et Gary Pitkin (les aspects médico-légaux de la réanimation cardiopulmonaire).

Ajoutons encore les Drs Jack Stockton (l'impôt et la planification des placements), Frederick Lackie (la rectification de l'occlusion de la denture naturelle), Simon Weinberg (les

complications survenant durant et après une opération buccale), Herbert Shillingburg, fils, (une approche simplifiée des restaurations avec des modèles) et William Hettenhausen (la promotion de la santé dans l'environnement buccal).

Pour leur part, les Drs Joel Epstein, James Main, Anthony Parnell et Walter Sussel ont tenu un débat sur la façon d'insonoriser le cabinet dentaire.

D'autres conférences cliniques ont eu lieu, entre autres celles du Dr Joel Edelson (l'endodontie chirurgicale) et de M. Barry Wortzman (les ennuis des fautes professionnelles).

Enfin, il s'est donné dix minicliniques et 41 cliniques en table ronde durant les quatre jours qu'a duré le congrès.

Quant aux conjoints et aux invités, on leur a offert de déjeuner à la tour du CN, de participer à un cocktail, d'assister à la présentation d'une collection de fourrures ainsi qu'à une démonstration faite par Mons. C.R. Porter de la maison Josiah Wedgwood (Canada) Ltée.

Régime d'épargne-retraite de l'ADC

Les valeurs respectives du Régime d'épargne-retraite de l'Association Dentaire Canadienne étaient les suivantes au 31 mai 1982.

Fonds d'actions ordinaires	\$48.2337
Fonds à revenu fixe	\$27.8573
Fonds garanti	\$23.3235
Fonds de placement	\$10.7315

L'avoir total (valeur marchande) du régime s'élevait à \$29,679,534.

Au 31 avril 1982, les chiffres du mois précédent étaient les suivants:

Fonds d'actions

ordinaires	\$48.5894
Fonds à revenu fixe	\$27.5881
Fonds garanti	\$23.0555
équilibré	\$10.7737

L'avoir total (valeur marchande) du régime s'élevait à \$29,975,216.

Pour de plus amples renseignements, veuillez écrire à l'adresse suivante: Canadian Dental Service Plans Inc., Ste. 600, 2 Lansing Square, Willowdale, Ontario M2J 4Z3, ou appeler le service de renseignements du CDSPI en composant 1-800-268-5418 (497-7171 pour les résidents de Toronto).

Les dentistes doivent exercer des pressions — le Dr Williams

“Il est aussi important pour notre survie de connaître les rouages de la politique touchant la médecine dentaire que d'en bien connaître les méthodes administratives et d'avoir les talents nécessaires en clinique.”

C'est le message qu'a livré, le 10 mai, le Dr Donald E. Williams, président de l'Association dentaire canadienne, devant une salle comble, au déjeuner de son organisme lors du congrès de Toronto. Il a précisé que les dentistes canadiens devaient commencer à exercer des pressions pour combattre les politiques fédérales qui seraient contraires au bien public.

C'est en ce sens, d'ailleurs, que l'ADC a exercé de fortes pressions pour combattre le projet d'impôt fédéral sur les primes d'assurance dentaire versées par les employeurs, de souligner le président.

L'Association entretient aussi des relations soutenues avec divers ministères fédéraux, Santé et Bien-être, Finances, Revenu et Commission du tarif, en ce qui a trait aux tarifs des approvisionnements dentaires, au programme des thérapeutes dentaires, aux subventions de recherche, aux activités du groupe de travail en hygiène dentaire et au nouveau programme de développement de la fluoration, ajoute le Dr Williams.

Ce n'est pas par accident qu'on a établi le siège social de l'Association à Ottawa, dit-il. Cela a été voulu pour mieux nous permettre d'influencer ceux qui ont à prendre les décisions et d'exposer clairement nos vues pour le bien de tous les Canadiens.”

Au niveau provincial

Alors que l'ADC s'affaire à rencontrer les représentants du gouvernement fédéral, les associations provinciales se préoccupent des activités des gouvernements provinciaux.

Terre-Neuve rédige une nouvelle loi sur la médecine dentaire et propose



Le Dr. Donald E. Williams

une nouvelle réglementation des soins dentaires aux enfants. La Nouvelle-Écosse a chargé un groupe de travail d'examiner le programme de soins dentaires aux enfants. L'Île-du-Prince-Édouard revoit son programme destiné aux enfants. Le Nouveau-Brunswick prépare également une loi sur la médecine dentaire et négocie une nouvelle entente sur les soins dentaires aux assistés sociaux.

Le Québec propose un projet de loi qui permettrait au gouvernement d'imposer sa volonté par décret dans

des domaines comme le placement, la rémunération des médecins et l'établissement d'un nouveau programme de prévention pour les enfants, qui serait mis en œuvre ailleurs qu'au cabinet privé du dentiste.

Dans l'ouest, la Colombie-Britannique fait face au problème des denturologues en ce qui a trait aux prothèses dentaires, l'Alberta prépare une nouvelle loi sur la médecine dentaire, la Saskatchewan vient d'étendre son régime de soins dentaires aux enfants et le Manitoba a maintenant un nouveau gouvernement.

Au niveau national, l'Association dentaire canadienne poursuit son programme d'agrément des écoles dentaires, avec l'aide de la profession, des facultés, des registraires des instances de réglementation, de l'Association canadienne des facultés de médecine dentaire, du Collège royal des dentistes du Canada, du Bureau national d'examen en médecine dentaire, de l'Association canadienne des hygiénistes dentaires, de l'Association canadienne des infirmiers et assistants dentaires, ainsi que des étudiants en médecine dentaire.

Le régime d'agrément “protège la population contre la maladresse et le manque de formation chez les praticiens et l'incite à faire confiance à la profession”, de dire le Dr Williams.

“En somme, c'est cette confiance en la profession, que le programme d'agrément développe au sein de la population, qui devrait avant tout inciter tous les dentistes à adhérer à l'Association dentaire canadienne. Comme la fluoration, le régime d'accréditation est un processus continu qui offre à tous des avantages à longue portée.”

Le Dr Williams souligne que les 13 000 dentistes du pays doivent former une seule équipe et travailler ensemble “dans un esprit de confiance, de respect mutuel, et avec le désir de se comprendre les uns les autres.”

Les Drs R. Moran et R. Kellen honorés par l'ADO

Le 11 mai dernier, lors du Congrès de l'ADC et de l'ADO, le Dr Roderick L. Moran, président de l'ADO en 1973-1974, et le Dr Ronald M. Kellen, membre du Conseil d'administration de l'ADO depuis 1974, ont reçu la récompense *Barnabus Day* pour service émérite.

C'est le Dr Robert Schiewe, président sortant de l'ADO qui a fait les présentations. Les récompenses sont décernées pour un service exceptionnel rendu à la profession dentaire, pour une contribution remarquable ou pour des services rendus à la profession pendant au moins 20 ans.

Le Dr Moran a été président de l'Association dentaire canadienne en 1978-1979 et, depuis 1975, il agit comme agent des Régimes des rentes et d'assurance subventionnés par l'ADC (CDSPI).

Comme agent de l'ADC, il a participé à la croissance et à l'établissement de l'organisation durant la période mouvementée de sa restructuration et de son aménagement à Ottawa. De



Le Dr. Roderick L. Moran

plus, il a largement contribué à poser des fondements économiques et structurels solides pour permettre à l'association nationale de se développer de façon continue.

À titre de président du Comité consultatif des régimes d'assurance dentaire, le Dr Kellen a été honoré pour "sa façon exemplaire de diriger le comité qui a établi les politiques, les normes et les directives actuelles" touchant les régimes d'assurance dentaire. Les politiques énoncées à l'époque sont acceptées de façon presque générale par la profession dentaire



Le Dr. Ronald Kellen

et les compagnies d'assurance du Canada.

Alors qu'il était membre du Comité consultatif des services dentaires, le Dr Kellen a contribué grandement à la recherche et à l'élaboration des politiques qui ont mené à la publication du manuel intitulé: "The Changing Dental Profession — New Directions for Practice in the 80's and Beyond." Ce manuel a fourni les renseignements de base qui ont permis d'établir les politiques et les lignes directrices touchant les nouveaux formulaires dentaires.

Le nouveau président de l'ADO, le Dr D.B. Smith



Le Dr. Robert Schiewe (à gauche) remet l'insigne de la présidence à son successeur, le Dr. Douglas B. Smith.

Lors du Congrès de l'ADC et de l'ADO, le 11 mai dernier, le président sortant de l'Association dentaire de l'Ontario, le Dr Robert Schiewe de

Thunder Bay, a remis le collier présidentiel à son successeur, le Dr Douglas B. Smith, de Belleville.

Celui-ci a déclaré que, durant son mandat, il compte établir des programmes visant à encourager les dentistes à aider leurs patients à toucher les indemnités auxquelles ils ont droit en vertu de leurs régimes d'assurance dentaire.

Dans l'intérêt des patients tout comme dans celui des dentistes, a-t-il souligné, on ne saurait permettre à une tierce partie de prendre part aux décisions touchant la nature des soins dentaires requis par les patients.

Le Dr Smith est également préoccupé par la situation économique

actuelle et ses conséquences possibles. "Notre province, et de fait toute notre société, éprouve de sérieuses difficultés économiques. Nous devons trouver un moyen d'équilibrer les ambitions économiques légitimes de notre profession et les insurmontables problèmes financiers qu'ont les gens faisant appel à nos services."

Praticien général, le Dr Smith habite Belleville avec son épouse, Janet, et leurs deux filles, Karen et Jillian, âgées respectivement de deux ans et de trois mois.

Il s'intéresse activement aux affaires de la ville et, dans ses moments de loisir, fait de la voile dans la Baie de Quinte.

Assurance Invalidité

... combien vous faut-il ?

La plupart des assureurs estiment que si vous êtes frappé d'invalidité il vous faudra une certaine incitation pécuniaire pour vous faire recommencer à travailler. C'est pourquoi ils limitent strictement, en fonction de vos revenus, les montants de garantie Invalidité que vous pouvez souscrire.

Par exemple, un dentiste ayant un revenu annuel avant impôts de \$ 60 000 ne pourrait probablement pas souscrire plus de \$ 28 000 d'assurance Invalidité non imposable, ce qui se traduirait par une perte de revenu net pouvant se situer entre \$ 11 000 et \$ 13 500 par an, selon le taux d'imposition de sa province de résidence.

D'un autre côté, le régime d'assurance des dentistes du Canada offrirait au même dentiste jusqu'à \$ 48 000 d'indemnité annuelle non imposable, ce qui le protégerait contre toute baisse de son niveau de vie. Le niveau de vie des dentistes dont le revenu est proche de la moyenne nationale est nettement mieux protégé par le régime de leurs associations, comme le montre l'exemple ci-dessous.

Revenu annuel avant impôts	\$ 60 000
Revenu disponible approximatif (\$ 60 000 moins impôts et une cotisation à un régime de retraite d'Etat). Ce revenu sert de base au calcul du niveau de vie actuel. ⁽¹⁾	\$ 40 000
Revenu maximum après impôts en cas d'invalidité, avec une garantie maximum souscrite auprès d'un assureur normal	\$ 28 500
Perte de revenu	\$ 11 500
Revenu non imposable en cas d'invalidité, avec une garantie maximum souscrite auprès du régime d'assurance des dentistes du Canada ⁽²⁾	\$ 48 000

De combien avez-vous besoin ?

Vous aurez probablement besoin d'au moins 80 % de votre revenu après impôts, avec l'indexation sur le coût de la vie, pour conserver votre niveau de vie actuel si vous étiez atteint d'une invalidité prolongée. Il vous faudrait moins si vous avez des placements qui vous rapportent, et plus si vous avez beaucoup d'enfants ou de grosses dettes.

Si vous avez déjà votre propre assurance Invalidité, vous pouvez quand même profiter du régime d'assurance des dentistes du Canada pour porter votre garantie totale à un niveau suffisant. Les avantageux tarifs qu'il offre vous permettront de souscrire les montants dont vous avez besoin encore plus facilement.

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⁽¹⁾ Le revenu après impôts indiqué est basé sur une moyenne provinciale pour les dentistes avec un conjoint et deux enfants à charge et, selon la province de résidence, il peut varier entre \$ 39 000 et \$ 42 000.

⁽²⁾ L'indemnité d'invalidité du RADC peut être réduite si le total de toutes les indemnités (régimes privés et régimes d'Etat) est supérieur au revenu avant impôts d'avant l'invalidité.

En bref —

Afin d'empêcher les trouble-fête de répandre le désordre lors du Congrès de l'ADC et de l'ADO qui s'est tenu au Centre Sheraton de Toronto, du 9 au 12 mai, des agents de sécurité avaient été postés au haut des escalateurs menant à la grande salle de bal, afin de vérifier les pièces d'identité des gens.

Le président de l'ADC, le Dr Donald E. Williams, a eu l'occasion de s'assurer personnellement que la surveillance était efficace.

Pressé de se rendre à un rendez-vous près de la salle de bal, le Dr Williams est arrêté par deux agents de sécurité en uniforme qui lui demandent de présenter des pièces d'identité. Embarrassé par cet imprévu, l'interpellé fouille en vain ses poches.

En désespoir de cause, il déclare aux agents: "Je suis seulement le président de l'ADC."

Aussitôt ceux-ci se confondent en excuses et permettent au Dr Williams de passer outre. Comme quoi les rôles se renversent vite parfois.

À Saskatoon, Saskatchewan, on se proposait d'abolir le cours professionnel donné à l'intention des assistantes dentaires à l'Institut Kelsey, mais à la suite des protestations formulées par les parents, les dentistes et d'autres groupes du Nord de la Saskatchewan, le gouvernement provincial a renversé sa décision au début d'avril.

Lorsque celui-ci a annoncé l'abolition du cours, on a craint une pénurie d'assistantes dentaires dans le Nord de la province. La plupart des élèves qui suivent le cours proviennent des villes du Nord et, dans les mémoires présentés au gouvernement, elles rejetaient l'idée d'aller poursuivre leurs études à l'Institut Wascana de Regina.

Lors de son assemblée annuelle au mois de mai à Toronto, l'Association canadienne des orthodontistes a élu

comme président le Dr Robert Hicks qui a déjà été président du Collège des chirurgiens dentistes de la Colombie-Britannique et qui est maintenant membre du Conseil d'administration de l'ADC.

Le Dr Hicks assumera ce poste jusqu'en septembre 1983. Il sera entouré par les Drs Jack Dale, président sortant, Frank Sammy, président élu, Jean-Louis Ayres, secrétaire-trésorier, et Ian Milne, vice-président.

Diplômé de l'Université de l'Alberta, le Dr Hicks y a obtenu un doctorat en chirurgie dentaire en 1962 et une maîtrise ès sciences avec une spécialisation en orthodontie en 1967.

Après avoir pratiqué la dentisterie pendant plusieurs années à Ste-Foy, Québec, le Dr Yves Poulin a dû subir une opération importante qui aurait pu l'amener à renoncer pour toujours à sa profession. Aussi, malgré ses 40 ans, a-t-il décidé de s'inscrire à un cours de maîtrise en administration commerciale à l'Université Laval.

Âgé maintenant de 44 ans, le Dr Poulin n'a qu'à se féliciter de son courage et de ses efforts. Il exploite toujours son cabinet dentaire à temps partiel et, à l'occasion, il donne des cours à l'Université Laval, mais le reste du temps, il agit comme conseiller en administration pour les dentistes.

Récemment, l'Université Laval l'engageait pour préparer un cours d'administration dentaire au niveau du baccalauréat que l'étudiant doit suivre après avoir réussi un cours d'éthique et de dentisterie comme profession constituée.

"Le cabinet dentaire ressemble à une petite entreprise," a déclaré le Dr Poulin.

Le dentiste doit s'intéresser à la commercialisation, à la production, à l'économie et à la comptabilité s'il veut pouvoir réussir. Son cabinet doit être bien géré.

"Il n'y a pas place pour la simplicité," a-t-il ajouté. "Le dentiste ne peut plus se concentrer sur l'adresse manuelle seulement. Il doit s'y connaître dans d'autres domaines. De fait,

exploiter un cabinet dentaire est maintenant une grosse affaire."

Diplômé dentaire de l'Université de Montréal en 1962, le Dr Poulin espère que les écoles dentaires du Canada s'intéresseront à ce problème actuel et offriront à leurs étudiants des cours d'administration qui leur seront utiles après l'obtention de leur diplôme.

Après tout, de poursuivre le Dr Poulin, les diplômés peuvent maintenant s'attendre à devoir déboursier plus de 50 000\$ pour établir leur propre pratique.

Aussi espère-t-il pouvoir commencer à donner des cours d'administration aux dentistes du Canada entier avant deux ans.

La promesse d'un régime universel de soins dentaires faite au mois de mars en Saskatchewan s'est effacée le 26 avril avec la défaite du gouvernement NPD de M. Blakeney.

Les dentistes de la province ont vite fait d'approcher le nouveau ministre de la santé, M. Graham Taylor, qui a été nommé récemment à ce poste. Celui-ci s'est dit intéressé aux soucis, aux problèmes et aux aspirations des dentistes et a accepté de prendre la parole devant le Collège des chirurgiens dentistes de la Saskatchewan, dont l'assemblée devait se dérouler du 10 au 12 juin, de souligner le Dr George Peacock, secrétaire-trésorier et registraire du collège.

Mme Linda Strevens a été nommée assistante adjointe du Collège royal des chirurgiens de l'Ontario, poste qu'elle occupera à compter du 30 août 1982.

Mme Strevens a fait ses études à l'Université de Toronto où elle a obtenu un diplôme en hygiène dentaire en 1973 et un baccalauréat en science dentaire en 1979. Depuis, elle y est professeur.

Après du collège, elle a servi comme examinatrice lors des examens donnés pour obtenir un diplôme en hygiène dentaire et aidé à améliorer les cours d'orthodontie.

Les Actualités

Le doyen de la Faculté de dentisterie de l'Université de l'Alberta, le Dr Gordon W. Thompson, a été récemment élu président de l'Association des facultés dentaires du Canada. Ancien élève de l'Université de l'Alberta, le Dr Thompson y a reçu un doctorat en chirurgie dentaire en 1965. À l'Université de Toronto, il a obtenu une maîtrise en science dentaire et un doctorat en philosophie.

De plus, il est membre du Collège royal des dentistes du Canada et du Collège international des dentistes.

Son mandat de président entre en vigueur ce mois-ci, au moment de son investiture lors de l'assemblée tenue à Halifax. Il succède au Dr Ralph Barolet, professeur à l'Université Laval.

L'AFDC a nommé comme vice-président et trésorier le Dr Arthur Schwartz, doyen de la Faculté de dentisterie à l'Université du Manitoba.

La nouvelle loi de l'Ontario touchant la protection contre la radiation dans les services médicaux stipule que quiconque administre des rayons-x dans le cabinet d'un dentiste doit avoir suivi avec succès un cours sur la sécurité dans le domaine.

Le règlement entrera en vigueur le 1^{er} janvier 1984, ou à une date ultérieure fixée par le ministre de la santé.

Les cours seront offerts par les collèges communautaires de l'Ontario et le ministère de la Santé informera tous les cabinets de dentiste de la date où ils se tiendront.

Pendant un an et demi, les membres de la Société de dentisterie 1982, y compris les étudiants dentaires finissants de l'Université de l'Alberta, ont recueilli des fonds en vue d'améliorer les installations dentaires à l'intention des gens âgés et des handicapés d'Edmonton.

Le 5 mai dernier, ils avaient raison d'être fiers.

Ayant amassé 27 827,26\$, ils ont pu offrir un appareil Orthopan 5 et un bloc dentaire portatif au service d'enseignement gériatrique qui fait partie de l'aile Youville, à l'Hôpital général d'Edmonton. Ils ont également pu offrir à la *Rosecrest Home*, un hôpital pour enfants handicapés situé à Edmonton, un service dentaire mobile complet comprenant un bloc portatif, un compresseur, une lampe et un chariot.

Grâce à l'appareil Orthopan, il sera possible de prendre des radiographies dentaires extra-buccales. Comme une seule radiographie est nécessaire pour la région buccale entière, le patient sera exposé à moins de radiations. Quant aux blocs dentaires portatifs, ils seront très utiles pour soigner les malades alités.

Les dons ont été présentés dans la principale salle de l'Hôpital général d'Edmonton, au 11111 de l'avenue Jasper, à Edmonton.

Parmi les principaux dignitaires présents, on remarquait l'Honorable D. Russell, ministre albertain des Soins hospitaliers et médicaux; le professeur L.C. Leitch, vice-président (finances et administration), de l'Université de l'Alberta; le Dr G.W. Thompson, doyen de la Faculté de dentisterie; le Dr S. Greenhill, attaché à l'aile Youville de l'Hôpital général d'Edmonton, Mme M. Toner, directrice des soins pour les pensionnaires de la *Rosecrest Home*; et des membres de la Société de dentisterie 1982.

Le Dr Marvin Kay est un anesthésiste dentaire et un numismate de Toronto. Dernièrement, il concevait un moyen fort original de marquer les jalons d'une carrière.

En effet, il a fait frapper une médaille pour récompenser tout anesthé-

siste qui a pratiqué 10 000 anesthésies.

Diplômé de la Faculté de médecine de l'Université de Toronto, le Dr Kay s'intéresse sérieusement à la numismatique depuis 40 ans et est un anesthésiste à temps complet.

Il y a environ 15 ans, il décidait de pratiquer, à temps partiel, l'anesthésie dans les cabinets dentaires. Ses services ont été tellement appréciés qu'il est vite devenu un anesthésiste itinérant à temps complet.

En février, il administrait l'anesthésie pour la dix millième fois. Aussitôt, il a conçu l'idée d'une médaille pour commémorer l'événement qui, croit-on, marque un record au Canada et même, probablement, dans toute l'Amérique.

La médaille a 2½ pouces de diamètre. Sur l'avvers, on peut lire, entourés d'une guirlande de feuilles d'érable, les mots: "*Marvin Kay, M.D. Toronto/Canada.*" Sur l'envers, l'événement commémoré est indiqué par ces mots: "*10,000 General Anesthetics Performed in Dentists' Offices/February, 1982.*"

Dans les rues d'Ottawa, on peut apercevoir souvent des voitures portant des plaques matricules rouges avec les lettres "CDA" (Canadian Dental Association).

Au cours d'une assemblée du Conseil de l'Éducation qui s'est tenue à Ottawa, du 17 au 19 mai, on a demandé si les voitures en question n'appartenaient pas à des membres privilégiés de l'Association dentaire canadienne.

Malheureusement, ce n'est pas le cas. Ces plaques sont accordées au personnel des corps diplomatiques étrangers résidant à Ottawa et il est peu probable que le privilège soit jamais concédé aux membres de l'ADC. Cependant, on peut toujours y voir une publicité à bon compte.

Réanimation : le bon sens peut prévenir les poursuites

Les professionnels qui ont reçu une formation en réanimation peuvent prévenir les poursuites judiciaires, s'ils agissent avec bon sens dans les situations d'urgence, s'ils se tiennent au fait des nouvelles méthodes et s'ils gardent des notes précises et détaillées de leurs interventions.

C'est le conseil que le Dr Gary E. Pitkin, gouverneur de l'Association dentaire canadienne pour la région de l'Ontario, a donné aux participants du congrès de l'ADC et de l'ADO qui s'est déroulé à Toronto.

Si le Canada n'a pas encore connu de problème judiciaire sur ce point, compte tenu du nombre croissant de personnes formées aux techniques de réanimation, ce n'est qu'une question de temps pour que cela se produise, croit le Dr Pitkin.

En droit civil, le dentiste peut avoir à répondre à une accusation de manquement au devoir, un délit qui donne droit d'ester en jugement si l'on croit avoir subi un tort. Le délit peut être considéré comme intentionnel si par exemple le patient soutient qu'on lui a extrait la mauvaise dent, ou comme un délit de négligence civile si le praticien avait pu prévenir l'incident en portant davantage attention à son travail. En principe, le dentiste est tenu légalement de veiller à ne pas exposer le patient au risque ni aux lésions corporelles, de dire le Dr Pitkin.

À ceux qui détiennent une police d'assurance responsabilité, quel que soit le genre de poursuite dont ils pourraient faire l'objet, le Dr Pitkin conseille de "bien voir à prévenir votre assureur si vous pensez que vous pourriez être poursuivi pour faute professionnelle ou autre. Autrement, vous pourriez vous retrouver sans assurance."

Quant à ceux qui ont appris les techniques de réanimation, il les prie de "faire pour le mieux pour la victime. Agissez avec bon sens. Si vous ne con-

naissez pas la technique, vous devez faire quelque chose. C'est mieux que rien, en autant que vous n'empirez pas la situation, notamment en traitant une personne qui n'a plus de pouls ou qui ne respire plus. Si vous connaissez la technique, la loi est plus exigeante à votre égard."

Des notes précieuses en défense

Au dentiste qui est amené devant le tribunal et dont les notes sont versées au dossier comme éléments de preuve, le Dr Pitkin donne le conseil suivant : "De bonnes notes peuvent vous sauver, mais vous perdrez votre cause si vous n'avez pas de notes."

"Veillez à prendre des notes, insiste-t-il. Portez attention aux détails, comme Hemingway l'a fait pour ses romans." Les meilleurs soins médicaux peuvent être mis en doute lorsque des notes négligées, illisibles ou insuffisantes sont versées au domaine public.

Vos notes doivent montrer que "vous avez fait ce qu'un bon sauveteur aurait fait dans les circonstances," de dire le Dr Pitkin. Elles ne doivent pas indiquer une attitude négative, mais plutôt celle d'un professionnel "plein d'attention et de compassion envers ses congénères." On devrait y lire, à titre d'exemple : "il s'agit d'une dame âgée et agréable" plutôt qu'une "vieille femme". "Il est très important de surveiller ses relations publiques," dit-il.

Les lois dites du Bon Samaritain

Les lois dites du Bon Samaritain font actuellement l'objet de discussions dans plusieurs coins du Canada et des États-Unis. Le Dr Pitkin estime qu'elles présentent des inconvénients comme des avantages.

Elles ont pour objet de protéger une personne poursuivie devant les tribunaux après avoir vainement tenté de ranimer quelqu'un en appliquant les techniques de réanimation.

Par ailleurs, dit-il, lorsqu'elles existent, ces lois font l'objet d'une codifi-

cation qui entre "beaucoup trop dans les détails." Tout y est défini et, si les circonstances dans lesquelles vous vous trouvez n'ont pas été prévues, alors "la loi ne vous protège plus."

La loi du Bon Samaritain existe au Manitoba depuis 1972, à Terre-Neuve depuis 1971 et en Saskatchewan depuis 1976. L'Ontario n'en a pas, mais le ministre de la Santé, M. Larry Grossman, examine actuellement la question, de dire le Dr Pitkin.

La question des soins de réanimation doit, à son avis, être examinée "à un niveau supérieur à la loi, c'est-à-dire du point de vue de la morale. Si vous en connaissez la technique, avez-vous l'obligation morale de l'appliquer? Je crois que c'est votre devoir à titre de professionnels."

Si, en arrivant sur place, quelqu'un constate qu'on applique les techniques de réanimation incorrectement et que le sauveteur "cause beaucoup de tort," le Dr Pitkin est d'avis qu'il doit alors évaluer la situation "avec une grande assurance. Assurez-vous d'avoir raison, autrement leurs avocats rouleront en cadillacs."

Si vous n'appliquez pas la réanimation correctement, de prévenir le Dr Pitkin, "une pluie de procédures peut s'abattre précipitamment sur vous, et cela peut impliquer non seulement le sauveteur mais aussi celui ou celle qui l'a formé et même certains des témoins."

Le Dr Pitkin incite fortement ceux qui connaissent la réanimation à se tenir au fait des nouvelles méthodes et à obtenir un nouveau certificat.

Il espère que la règle du "bon sens selon les circonstances", exprimée en droit par le "res ipse loquitur," continuera de prévaloir. Il craint que "le système ne s'effondre" à la première poursuite intentée contre un réanimateur. "Personne ne veut être impliqué dans des procédures juridiques qui peuvent être hasardeuse," dit-il.

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Textbook of Pediatric Dentistry

Edited by

Raymond L. Braham,

Merle E. Morris

*Williams & Wilkin
Baltimore, 1980.*

There was a time when everything you wanted to know about pediatric dentistry could be found in a manual-like book which was compiled and edited by a single author. Times have changed, and pediatric dentistry, like a maturing child, has become more complex. Braham and Morris, recognizing the complexity of their subject, have gathered the expertise of 30 contributors, and acting as editors, have produced a text which attempts to deal with most aspects of children's dentistry.

The book is divided into seven sections, and includes growth and development, etiology of dental disease, diagnosis and treatment of dental disease, the dentist's armamentarium in the management of dental disease in the pediatric patient, special considerations in the treatment of the pediatric dental patient, and preventive and community dentistry for children.

Growth and development is highlighted by an excellent chapter on craniofacial growth which gives an understanding of the changes one might expect in the development of the jaws and face. The chapter on physical growth was boring, while that on defects of the teeth was clear and concise. A short chapter on the morphology of the primary dentition will be helpful for those interested in root canal procedures, while the chapter on behaviour and personality reads like a watered-down psychology test.

The etiology of dental disease is dealt with briefly, and discusses the various theories of dental decay as well as the basic causes of

periodontal disease.

Diagnosis and treatment of dental disease ranges from a lengthy overview of the medical assessment and care of the child, through operative dentistry, interceptive orthodontics, trauma and pulp treatment. The chapter dealing with the oral aspects of diagnosis and treatment deals with the philosophy of the diagnostic process and outlines an excellent checklist from which a treatment plan can be drawn. Continuing down the diagnostic pathway, radiology is covered not only by a description of technique, but also by a short section on interpretation.

Operative dentistry is dealt with briefly, and covers most areas from rubber dam placement, cavity preparations, steel and polycarb crowns, and resins. The operative portion ends with an all too short discussion of the various materials utilized. A more thorough coverage of the acid-etch technique combined with an evaluation of the latest composite resins in dealing with enamel defects and stains would have been in order.

The chapter on dental pulp is one of the best in the entire book. The subject was covered thoroughly, dealing with direct and indirect pulp capping, pulpotomy and pulpectomy procedures, and ended with a short discussion on apexification.

Trauma was dealt with according to a modified Ellis classification of injuries to teeth, and included several clever splinting techniques. The chapter on oral surgery, although interesting in that it contained a short resume on hospital dental protocol, was not overly informative from a practical point of view.

Occlusal analysis techniques provided an overview of the principles of mixed dentition analysis as well as those of cephalometrics. A well-developed presentation on interceptive orthodontics

and space maintenance followed, with the only discord being the presentation of the distal shoe spacer as a device to guide the permanent molar into its proper position when the second primary molar has been lost. All too often, the results do not match the desires. The section ends with a superficial coverage of oral habits and the management of oral lesions. Further discussion would have been appropriate as the practitioner is being faced with a greater number of problems affecting the gingivae and soft tissues.

The section covering the dentist's armamentarium in the management of dental disease includes a well-presented chapter on patient management and another on anxiety and pain control. The authors discuss various management techniques and give guidance as to the handling of parents, local anaesthetic administration, and the structuring of appointments. Anxiety and pain control is discussed from a pharmacological point of view, and what ensues are the dos and don'ts and dosages of the various pain and mood altering drugs as well as a discussion on nitrous oxide and another on the various local anaesthetic agents.

The last section deals with prevention and the community's role in the delivery of dental services and the prevention of dental disease.

"Textbook of Pediatric Dentistry" is well presented, readable, and covers the various areas of pediatric dentistry in an organized and interesting way. It provides a good overview of the subject and seldom disappoints.

This review was prepared by Melvin D. Charendoff, DDS, MS, FRCD(C), a private practitioner in Toronto as well as an Associate in Dentistry, Department of Children's Dentistry, The University of Toronto.

History of Dentistry

(Walter) Hoffman-Axthelm

Quintessence Publishing Co.,
Inc. 1981.

Chicago, Illinois.

435 pages

Illustrated, hard cover.

\$100.00

Discussing a book whose author has been described as "without doubt Europe's greatest scholar of dental history"⁽¹⁾ could significantly intimidate a reviewer's appraisal. Dr. Walter Hoffmann-Axthelm, who holds degrees in both medicine and dentistry, originally wrote this text in German. Entitled "Die Geschichte der Zahnheilkunde," it was published by Quintessence Publishing Company in 1973. He assures the reader, however, that this English edition "is not a simple translation" but is in parts, "an almost different book" reflecting updated information and new insights.

The volume is deceptively small, but its 435 pages contain abundant fine quality illustrations and literally, thousands of references. Structurally, it is divided into two main sections.

Part 1 chronicles the infancy of the profession, tracing its genesis through the Pre-Christian eras of Egypt and Mesopotamia and their influence on dental philosophy in Ancient India, Japan and China. A view of Pre-Columbian dental practises of the Aztec, Maya and Inca is followed by a return across the Atlantic, touching on Greco-Roman medicine, the aftermath of European antiquity and the influence of the world of Islam.

Subsequent chapters describe the awakening of the natural sciences, and with the Renaissance, the evolution of dentistry as a specific discipline. Ambroise Paré, the apprentice barber who rose to be the founder of modern surgery, is acknowledged for his oral surgical skills, and with him the establish-

ment of Paris as the surgical centre for the next 200 years. From this enriched environment, arises Pierre Fauchard and his monumental literary/scientific work "Le Chirurgien Dentiste, ou traité des dents". Fifty years later, the British surgeon John Hunter publishes "The Natural History of the Human Teeth" in England, opening for the first time, a scientific pathway into the hitherto empirical dental world.

In Germany Philip Pfaff becomes the first to describe a technique for taking an impression, using pre-softened sealing wax. This respectability acquires for dentistry, an elevated social status, and at this ratified level, the first part of the book ends.

Part 2, entitled, "Dentistry in the Industrial Age" discourses on the fusion of European and American knowledge to create a profession which ultimately leads to an initiation of specialties. Chapters on prosthetics, conservative dentistry, dental surgery and orthodontics identify pioneers as well known as E.H. Angle and Horace Wells, in addition to the more obscure James Beall Morrison and Charles Stent, and along with a host of others, trace the development of these branches, into their current specialized disciplines.

This section, and the book concludes, with a chapter on research and teaching, explaining that the birth of a well rounded, well trained dentist is the result of "sometimes serious differences in opinions and in a variety of ways". (page 413)

H.M. Koehler's translation is idiomatic and free flowing. The reader, however, may find "History of Dentistry" a difficult book to read, because the book's strength is also its major weakness. Except for infrequent areas, like the section on Pierre Fauchard, the author has attempted little in-depth description. The voluminous numbers of dates, people and places, in addition to the innumerable footnotes, chapter-ending general references and extensive cross indexing will prove invaluable to the serious student of dental history. Alas, to the casual reader, the approach may be too sterile and unemotional. History, after all, must be personalities as well as people.

This book rightfully belongs in every dental faculty library, but is unlikely to find its way onto many dentists' shelves, which is a pity.

⁽¹⁾ Ring, Malvin E. "History of Dentistry" Book Review. *Bull. of History of Dentistry* 29:2, October, 1981.

This book was reviewed by John H. Gryfe, DDS, FRCD, Weston, Ontario.

CDA Retirement Savings Plan

Unit values of the Canadian Dental Association's Retirement Savings Plan stood as follows on May 31, 1982.

<i>Common Stock Fund</i>	\$48.2337
<i>Fixed Income Fund</i>	\$27.8573
<i>Guaranteed Fund</i>	\$23.3235
<i>Balanced Fund</i>	\$10.7315

Total assets (market value) of the plan were \$29,679,534.

The previous month's figures, as of April 31, 1982, stood as follows:

<i>Common Stock Fund</i>	\$48.5894
<i>Fixed Income Fund</i>	\$27.5881
<i>Guaranteed Fund</i>	\$23.0555
<i>Balanced Fund</i>	\$10.7737

Total assets (market value) of the plan were \$29,975,216.

For further information write to: Canadian Dental Service Plans Inc., Ste. 600, 2 Lansing Square, Willowdale, Ontario M2J 4Z3 or call the central information services of CDSPI At 1-800-268-5418 (497-7171 in Metro Toronto).

Aneurysmal bone cyst involving mandible

Pierre Surprenant, DDS
Gary H. Tinker, DDS
Sherbrooke, Quebec

The aneurysmal bone cyst is an interesting solitary lesion of bone which has been called by a number of confusing and conflicting names, among which are hemorrhagic osteomyelitis, ossifying hematoma, osteitis fibrosa cystica and aneurysmal giant cell tumor.¹ It was separated as a distinct entity in 1942 by Jaffe and Lichtenstein.² Since their original account, many cases have been reported in the literature, although the first cases occurring in the jaws were not described until 1958 by Bernier and Bhaskar.³

The aneurysmal bone cyst is generally a lesion affecting young persons, predominantly occurring under the age of 20 years, with no significant predilection for either sex. A history of traumatic injury preceding development of the lesion may often be obtained, although the role of trauma is debatable. These lesions have been observed in every part of the skeleton — 50 per cent of them in long bones and the vertebral column. An aneurysmal bone cyst gives a radiological appearance of non-characteristic lysis compatible with a large range of diagnoses. Histological study permits early diagnosis but must always involve the whole specimen, with careful examination to detect any other associated lesions.

The aneurysmal bone cyst occurs with some frequency in the jaws, although many are probably misdiagnosed as some other bone lesion. In a recent review of the literature,

Daugherty and Eversole found 17 reported cases in the jaws, 11 in the mandible and six in the maxilla. Of these, 80 per cent occurred in patients under 20 years of age, although the range was six to 59 years. There was a slight predilection for occurrence in females.⁴

The following case was most interesting because of the occurrence of this uncommon lesion as well as the problems encountered in the histological identification of the aneurysmal bone cyst.

REPORT OF A CASE

An 18-year-old female Caucasian was referred to the oral and maxillo-facial clinic on November 24, 1970 for evaluation of a swelling of the right mandible below the buccal area of the second premolar and first, second and third molars. She complained of a slow-growing, painless swelling of her right mandible of a "couple of months" duration." Her past and family histories and systemic examination did not reveal any abnormalities.

Intraoral inspection disclosed a visible dome-shaped protrusion of the soft tissue over the buccal plate of the alveolar bone. It was a firm non-tender enlargement about seven cm in length. The involved teeth tested non-vital and aspiration was essentially negative. Oral hygiene was normal.

The radiograph (**Fig. 1**) showed a distinctive radiolucency filling the right posterior mandible. The lesion appeared cystic and had expanded the surrounding bone.

On the day following admission to hospital, surgery was performed under general anaesthesia. Initially, simple extraction of non-vital 8765 was performed. The muco-periosteal flap was separated and reflected downwards, exposing clearly the underlying bony lesion. The bony shell was easily separated and the exposed mass was completely enucleated. It was thoroughly curetted and all suspect soft tissues adjacent to the cystic site were excised. The surgical specimen was forwarded to the pathologist who reported the lesion to be a hemangioma, based on the presence of numerous small blood vessels and blood-containing spaces.

Nine months later, follow-up radiography (**Fig. 2**) demonstrated a recurrence of the lesion with an apparent increase in size. A second surgical procedure was performed, involving curettage of the lesion with an immediate bone graft using cancellous bone from the iliac crest. A biopsy of the resected specimens was reported to be compatible with a fibrous dysplasia. The diagnosis was based on the presence of numerous fibroblasts, young fibrous connective tissue and varying amounts of bone.

Follow-up examinations revealed the presence of a fistula in the region of the right posterior mandible. This soon resolved following local debridement and irrigation. The patient was closely followed up for a year and a half. Although she denied symptoms, the radiographs (**Fig. 3**) showed persistence of the lesion, with no increase in its size. Distinct trabeculations were noticed; this was thought to be compatible with normal bone healing.

Not being satisfied with the progression of healing, we forwarded the radiographs and pathology slides to Dr. S.N. Bhaskar, Armed Forces Institute of Pathology, for his opinion. The lesion was diagnosed as an aneurysmal bone cyst.

The patient was hospitalized in July, 1975. Under general anaesthesia, surgical remodelling of the involved area was performed, and the resected specimen was sent to pathology. The report indicated that the lesion was consistent with the diagnosis of an aneurysmal bone cyst (**Fig. 4**). The postoperative course was normal and uncomplicated. Follow-up radiographs showed normal alveolar bone repair (**Fig. 5**). The patient was referred for fabrication of a prosthesis for the edentulous area.



Fig. 1 — Preoperative radiograph shows unilocular radiolucent area of body of right side of mandible underlying second premolar, first and second molars.

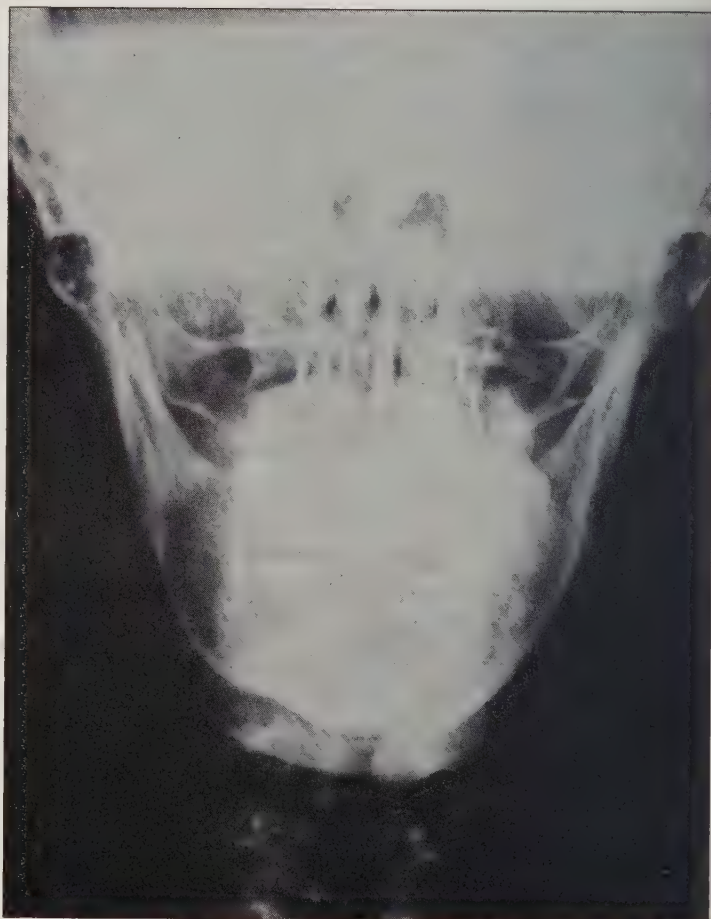


Fig. 2 — Posterior-anterior view showing persistent radiolucent lesion of body of right side of mandible.

DISCUSSION

The pathogenesis of this lesion is still controversial, despite the many cases which have been studied and reported. Jaffe and Lichtenstein² have proposed that the aneurysmal bone cyst arises as a result of a persistent local alteration in hemodynamics, leading to increased venous pressure and subsequent development of a dilated and

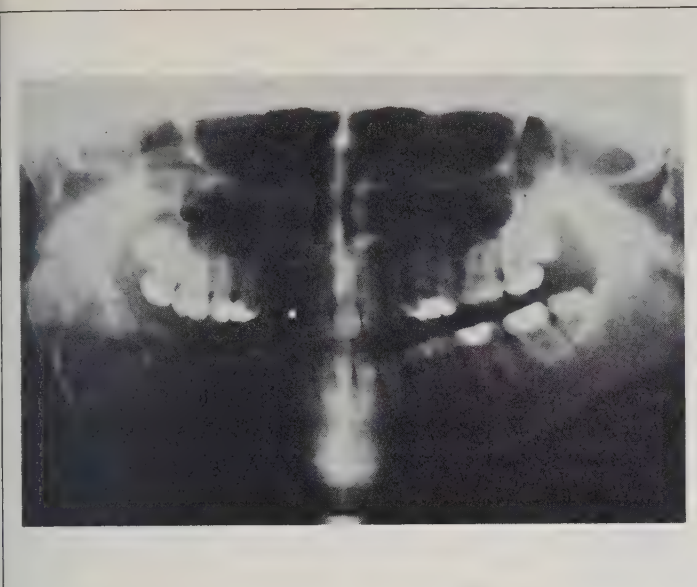


Fig. 3 — Panoramic radiograph, three years later, demonstrating persistent lesion. Notice a quantity of bony trabeculations present within radiolucent area.

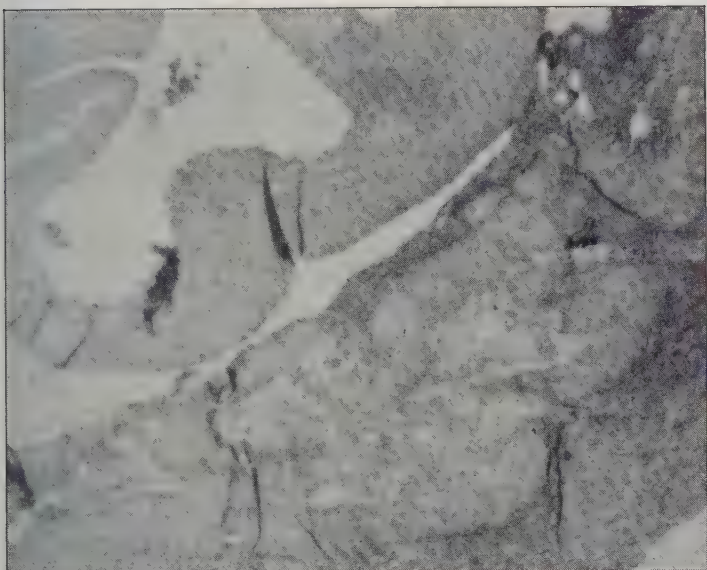


Fig. 4 — Definitive diagnosis: aneurysmal bone cyst.

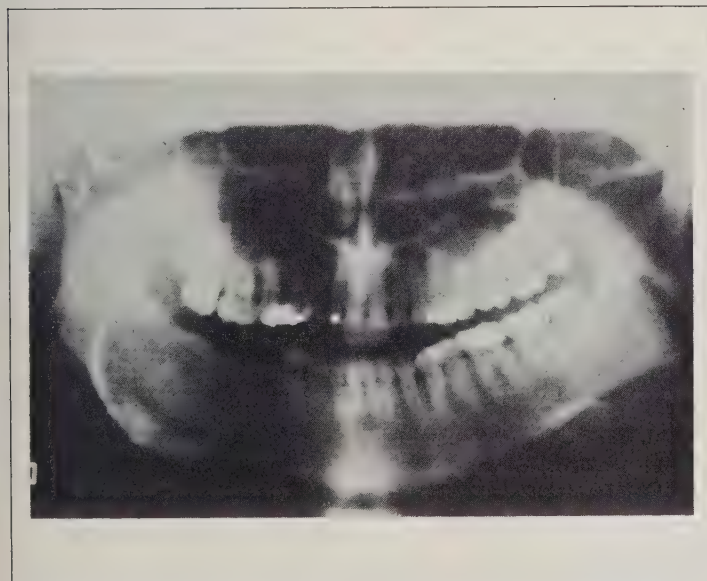


Fig. 5 — Panoramic radiographic showing postoperative course of lesion. Note the occurrence of normal bone repair.

engorged vascular bed in the transformed bone area. Resorption of bone then occurs, which accounts for the giant cells. This is replaced by a connective tissue, osteoid and new bone.

An alternative explanation of the lesions is that it represents an exuberant attempt at repair of a hematoma in bone, similar to the central giant cell granuloma. But in the case of the aneurysmal bone cyst it is postulated that the hematoma maintains its circulatory connection with the damaged vessel. This would produce a slow flow of blood through the lesion and account for the clinical "welling" of blood when the lesion is entered.

More recently, Biesecker et al have reported that 32 per cent of their series of aneurysmal bone cysts have an accompanying benign primary lesion of the bone. On this basis, they have proposed a new hypothesis for the etiology and pathogenesis of this lesion — namely that a primary lesion of bone initiates an osseous, arteriovenous fistula and thereby creates, via its hemodynamic forces, the secondary reactive lesion of bone — the aneurysmal bone cyst.⁴

SUMMARY

The aneurysmal bone cyst is an uncommon pathologic entity of the head and neck. A case is presented which illustrates the diagnosis, treatment, and problems which may occur.

The authors wish to thank Dr. Jean-Pierre Tremblay, pathologist, St. Vincent-de-Paul Hospital Centre, for his assistance in this case. Also, we wish to thank S.N. Bhaskar, DDS, MS, PhD, Brigadier General, DC., for his consultation.

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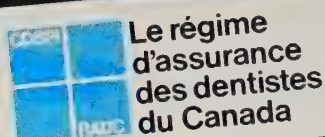
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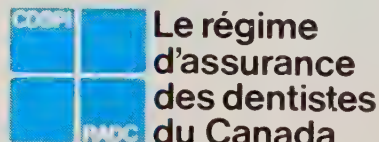
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Le traitement actuel des cancers de la cavité buccale

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Les tumeurs malignes de la cavité bucco-pharyngée représentent au minimum 5 à 7% de tous les cancers. Cette proportion ne paraît pas destinée à baisser. En effet, les facteurs carcino-génétiques les plus importants, alcool et tabac, ne semblent pas devoir régresser et s'étendent même progressivement à la population féminine.

Épidémiologie, prophylaxie, diagnostic, sont maintenant bien connus.⁽¹⁻²⁻³⁾ Les déficiences constatées encore de temps à autre comme des diagnostics trop tardifs, par exemple, relèvent d'une éducation toujours à améliorer, aussi bien au niveau des médecins et des dentistes que du public en général.

Les méthodes thérapeutiques, elles, sont l'objet de progrès continus dont nous ferons le point dans cet article. Le dentiste, dont le rôle est essentiel dans le diagnostic, devrait être habilité à suivre et à comprendre le traitement et l'évolution ultérieurs de la maladie.

LES MÉTHODES ACTUELLES DE TRAITEMENT DU CANCER EN GÉNÉRAL

Le cancer peut être actuellement traité de plusieurs manières, suivant des techniques isolées ou associées, qui sont la chirurgie, les radiations, la chimiothérapie, l'immunothérapie et l'hormonothérapie.

La chirurgie

C'est la méthode la plus ancienne. Elle tient encore une grande place bien que son principe (amputation tissulaire large) soit resté inchangé. Les progrès récents les plus spectaculaires ont eu lieu dans le domaine de la chirurgie réparatrice.

Les radiations

Leur emploi est basé sur les règles de la radio-biologie (action des rayons sur les tissus vivants, tumoraux et sains). La découverte périodique de nouvelles sources de rayonnement permet un progrès permanent. En quelques décades, on est passé des rayons X classiques aux super-

voltages puis aux isotopes (surtout Co⁶⁰). Le césium et le béta-tron sont maintenant aussi utilisés.

L'évaluation de la masse tumorale par tomographie axiale transverse et l'emploi d'un ordinateur pour la planification des exo-radiations ont permis d'accroître la précision de la dosimétrie à la tumeur, ce qui explique le progrès des résultats. Les irradiations interstitielles, sous forme d'aiguilles de radium ou de fils d'iridium, gardent aussi une certaine place.

La chimiothérapie

La chimiothérapie anticancéreuse fut d'abord utilisée en hématologie dans les processus malins systémiques. L'action antibiotique des drogues employées fut ensuite essayée dans les cas de tumeurs solides locales. Ces médicaments sont irremplaçables dans les stades évolués de métastases à distance souvent diffuses. Ils présentent toujours, malgré tout, un certain intérêt dans les lésions restées locales ou loco-régionales, soit comme traitement adjuvant, en préparation des traitements traditionnels comme la chirurgie, l'irradiation, ou en renforcement après leur application, soit comme tentative de traitement palliatif dans les cas de patients non contrôlés. Les indications et les modalités de ces traitements sont en évolution permanente et rapide en raison de l'apparition incessante de nouveaux médicaments. Les drogues d'usage courant sont actuellement au nombre de plusieurs dizaines. On peut les classer de la façon suivante :

- a) les alkylants (ex: cyclophosphamide). Ils bloquent l'acide désoxyribonucléique (ADN) en l'alkylant.
- b) les antimétaboliques
 - les antifoliques (ex: Méthotrexate)
 - les antipurines (ex: 6-Mercaptopurine)
 - les antipyrimidines (ex: 5-Fluorouracile ou "5-FU"). Ils inhibent certaines enzymes.
- c) les alcaloïdes végétaux (ex: vincristine et vinblastine). Ils entraînent un arrêt de la métaphase.

- d) certains antibiotiques (actinomycine, adriamycine, bléomycine). Ils inhibent la synthèse de l'acide désoxyribonucléique.
- e) différents produits à mécanismes d'action variés (hydroxamine, l-asparaginase).
- f) les composés du platine (cis-platinum), parmi les tout derniers nés.

L'effet commun de ces produits est de tuer un certain pourcentage de cellules néoplasiques. On laisse ensuite l'organisme au repos un moment pour qu'il puisse récupérer, avant de reprendre leur administration. Ces principes de conduite de traitement exigent des traitements intermittents qui sont aujourd'hui une règle absolue.

La possibilité d'utiliser des médicaments à mécanisme cytotoxique différent a conduit rapidement à un concept nouveau. Il est en effet d'usage d'utiliser en combinaison plusieurs médicaments dont les effets anti-tumoraux s'accumulent, tout en diversifiant, donc en minimisant, les effets nocifs sur les tissus sains.

La cellule néoplasique peut, par exemple, être atteinte au niveau des différentes phases de son cycle. La polychimiothérapie basée sur ce principe, est aujourd'hui d'application généralisée.⁽⁴⁻⁵⁻⁶⁾

L'immunothérapie

L'immunologie apportera probablement la solution définitive au problème du cancer, ce qui fait de l'immunothérapie une méthode d'avenir. Nous ignorons cependant actuellement les phénomènes intimes de l'antigénicité de la cellule cancéreuse. Aussi, l'immunothérapie non-spécifique de type actif doit-elle être considérée seulement comme un adjuvant intéressant.⁽⁷⁻⁸⁻⁹⁻¹⁰⁾

L'hormonothérapie

Les manipulations hormonales ne présentent d'intérêt qu'en présence de cancers hormono-dépendants. Leur liste est précise et courte et n'inclut pas les cancers bucco-pharyngés.

LES IDÉES DE BASE EN CARCINOLOGIE BUCCO-PHARYNGÉE

Un certain nombre d'idées de base s'applique aux cancers du bucco-pharynx et les caractérise plus spécialement. Elles concernent le type de tumeurs, la différenciation cellulaire, les tumeurs conjonctives, les effets secondaires des radiations, l'hyperconcentration des agents chimiothérapiques, et les lésions précancéreuses.⁽¹⁻²⁻³⁾

Le type de tumeur

Quatre-vingt cinq pour cent des tumeurs malignes de la muqueuse buccale sont des épithéliomas épidermoïdes, spino-cellulaires. Leurs caractéristiques sont une extension locale progressive et une diffusion "méthodique" par voie lymphatique suivant un schéma anatomique assez fidèle.

La différenciation cellulaire

La biopsie indique si l'épithélioma est plus ou moins bien différencié. Cette information est importante pour le choix du traitement⁽¹¹⁻¹²⁾ Dans les épithéliomas les plus

indifférenciés qui se trouvent être les plus postérieurs, les radiations sont efficaces et les plus employées. En revanche, la chirurgie reste un excellent traitement pour les épithéliomas de la lèvre, et certains cas d'épithéliomas de la langue qui sont surtout les mieux différenciés.

Les tumeurs conjonctives de la cavité buccale

Les sarcomes ou les tumeurs malignes des lignées hématologiques (plasmocytomes, réticulo-sarcomes) posent des problèmes de traitement difficiles et leur approche est hautement spécialisée. Nous ne les aborderons pas dans cet article.

Les effets secondaires des radiations

Les radiations appliquées au niveau de la sphère buccale peuvent entraîner certaines conséquences spécifiques et graves. Parmi celles-ci, on observe une atrophie du tissu salivaire dans son ensemble incluant les glandes salivaires mineures, et sa sidération fonctionnelle conduisant à une asialie. Des troubles trophiques qui sont des radiodystrophies définitives se développent aussi à bas bruit. Ils portent sur les tissus durs de la dent et sur l'os. Au niveau de la dent, des caries rampantes s'installent en conséquence de l'asialie. Le risque d'ostéoradionécrose persiste toute la vie, en cas d'infection d'origine dentaire ou de traumatisme.

L'hyperconcentration des agents chimiothérapiques

Certaines facilités d'ordre anatomique permettent de réaliser au niveau facial et cervical une hyperconcentration locale des agents antimitotiques par infusion intra-artérielle prolongée.

Dans la sphère bucco-pharyngée, deux types de chimiothérapie sont ainsi possibles: une chimiothérapie habituelle par voie générale et une chimiothérapie loco-régionale par voie intra-artérielle (fig 1).

Les lésions précancéreuses

Les lésions précancéreuses sont fréquentes au niveau des lèvres et de la muqueuse buccale (dyskératoses, leucoplasies, papillomes, etc. . .). Leur traitement est particulier. Pour des raisons biologiques ayant trait au mécanisme d'action des radiations sur la cellule et de l'action antimitotique de la chimiothérapie, radiation et chimiothérapie sont inefficaces. Seule peut être envisagée la chirurgie sous toutes ses formes: bistouri, électrochirurgie, cryochirurgie, laser, etc. . .

CONDUITE DU TRAITEMENT

Le traitement doit être envisagé en plusieurs étapes qui sont ses prérequis, le choix d'un plan de traitement, la préparation du patient, les cas particuliers de la mise en oeuvre éventuelle d'un traitement par radiations ou par chirurgie.

Les prérequis

Il est indispensable, d'une part, d'assurer un diagnostic absolu au moyen d'une biopsie qui apporte, en plus, des renseignements complémentaires concernant, par exemple, le degré de différenciation (grade de Broders) et la tendance à l'envahissement lymphatique, d'autre part,



Fig. 1. Modèle de pompe pour infusion chimio-thérapique intra-artérielle.

d'évaluer le stade évolutif de la tumeur.⁽¹¹⁻¹²⁾

Celui-ci résulte de la juxtaposition d'un certain nombre d'éléments tels les dimensions et la profondeur de la lésion, sa fixation et son extension aux organes voisins, l'envahissement osseux à partir des épithéliomas de surface qui peut s'évaluer classiquement par radiographie et, depuis quelques temps, par cartographie isotopique. La présence, d'importance capitale, d'une extension ganglionnaire doit être aussi considérée, ainsi que celle de métastases à distance, exceptionnelles dans le cas des épithéliomas débutants, de reconnaissance primordiale dans le cas d'une tumeur conjonctive. Cette évaluation peut être aidée par des examens paracliniques (radiographie, cartographie, échographie, etc. . .)

L'application de la classification TNM (tumor, nodes, metastasis) permet de préciser son diagnostic en stades I, II, III et IV.⁽¹¹⁻¹²⁾

Le traitement pourra ainsi être choisi et un pronostic avancé.

Celui-ci est facilité par les résultats qu'apporte le bilan des défenses immunitaires, les tests sanguins indiquant la qualité de l'immunité humorale ou immédiate, les tests cutanés celle de l'immunité cellulaire ou retardée (fig 2). La bonne connaissance de ce bilan permet d'orienter le traitement et d'éviter des non-sens thérapeutiques, comme celui d'effectuer des chirurgies mutilantes chez des sujets à défense immunologique nulle, car le pronostic est, chez eux, catastrophique.

Le choix de traitement

Les tumeurs malignes de la cavité bucco-pharyngée sont, dans 85 à 90% des cas, des épithéliomas épidermoïdes. Il faudra donc toujours envisager deux cibles pour le traitement: la lésion primitive et les ganglions.

Les moyens utilisés sont presque toujours les radiations,

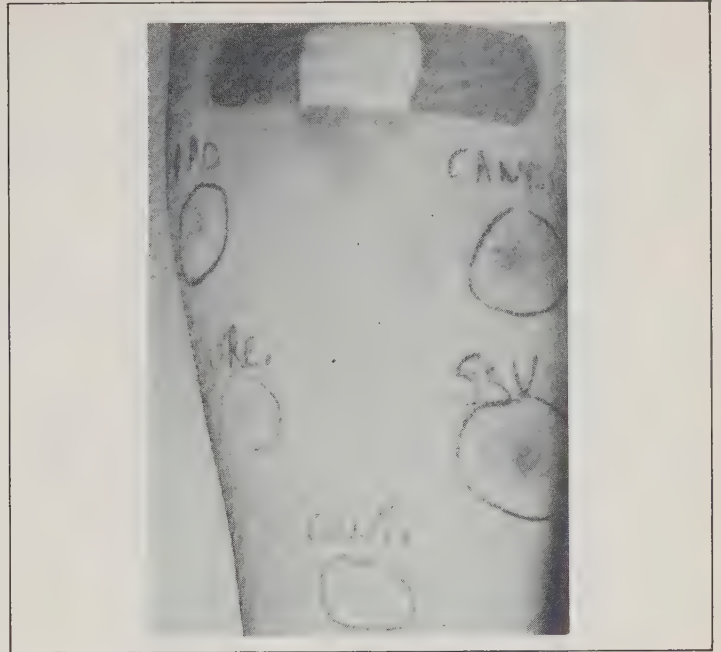


Fig 2. Test cutané pour l'évaluation de l'immunité cellulaire (retardée), exécuté au niveau de la face interne du bras, et montrant la réactivité du sujet vis à vis de certains antigènes.

la chirurgie, ou les deux associées. De très nombreuses combinaisons sont encore possibles, en tenant compte des règles générales suivantes.

- a — La lésion primitive est également traitable par radiations ou chirurgie, tandis que les propagations ganglionnaires répondent mieux à la chirurgie.
- b — Les lésions très volumineuses répondent moins bien aux radiations et le risque de dénudation osseuse, donc d'ostéoradionécrose immédiate, devient excessif.
- c — Après radiations, la chirurgie reconstructrice extemporanée ou précoce devient hasardeuse.
- d — Le meilleur traitement reste l'extirpation "monobloc" de la lésion primitive et des ganglions en continuité, chaque fois que l'anatomie des lésions en permet l'exérèse.

Parmi les combinaisons de traitements possibles les plus employées, on peut citer, par exemple, l'irradiation de la lésion primitive suivie d'éventuelles exérèses chirurgicales, précoces ou retardées, des aires ganglionnaires; ou encore le traitement par radiation globale pré-opératoire, suivi trois semaines plus tard, de l'exérèse de la tumeur et des ganglions correspondants en monoblocs.

Jusqu'à présent, la plupart des chimiothérapies n'étaient pas utilisées comme traitement d'attaque en cancérologie "tête et cou". En effet, elles affaiblissent l'état général, dépriment la défense immunitaire et retardent la cicatrisation, ce qui les rend incompatibles en principe avec la chirurgie. Récemment, cependant, on a pu les employer en traitement pré-opératoire, en remplacement parfois des radiations pré-opératoires, car elles sont capables de rendre secondairement extirpables des masses tumorales initialement inopérables. La place de la chimiothérapie reste malgré tout, pour le moment surtout, adjuvante ou

palliative. Des tests de toxicité, in vitro, sur des cultures de cellules tumorales devraient pouvoir à l'avenir faciliter l'emploi de la chimiothérapie chez le patient cancéreux.⁽¹³⁻¹⁴⁾ Le traitement actuel d'un cancer buccal est ainsi devenu, suivant l'expression moderne, "multimodal".

La préparation du patient au traitement

Toutes les constantes de l'état général du patient doivent être au préalable vérifiées et éventuellement corrigées. La tumeur elle-même doit être minutieusement évaluée avant le choix d'un traitement.

Enfin, et, en particulier, si l'on envisage des irradiations, les dents doivent être remises en état. Les extractions prophylactiques globales ne sont plus pratiquées actuellement. On sacrifie encore cependant celles qui sont trop atteintes. On prépare soigneusement les autres par des détartrages, des applications topiques de fluor, des restaurations si possible non métalliques. On confectionne, enfin, éventuellement des gouttières protectrices.

Le patient est alors prêt à recevoir son traitement qui peut être, comme on l'a vu, multimodal. Nous ne détaillerons que les deux volets les plus communs de la thérapie cancéreuse: les radiations et la chirurgie.

Mise en oeuvre éventuelle d'un traitement par radiations

La répartition des doses dans l'espace et le temps est la responsabilité du spécialiste radiothérapeute. Les doses appliquées seront toujours massives, réparties en général sur six à huit semaines. Les effets nuisibles locaux immédiats comme les radiomucites, les radioépidermites, une asialie progressive, les candidoses, une dysphagie gênant l'alimentation, devront être prévus et éventuellement corrigés, ainsi que les effets nuisibles généraux comme une anorexie, une anémie ou une hypoleucocytose.

Mise en oeuvre éventuelle d'un traitement chirurgical (15-16-17)

Celui-ci est souvent très complexe et porte sur la lésion primitive et, éventuellement, sur les ganglions.

La résection de la lésion primitive emprunte un schéma

variable suivant la localisation (**fig 3**), mais elle est toujours extensive avec une marge de sécurité importante. Une chirurgie reconstructrice s'impose alors d'emblée. Elle est souvent extrêmement sophistiquée et utilise des greffes, des lambeaux à distance (**fig 4**), ou même d'origine éloignée, abdomino-inguinale par exemple, avec micro-anastomoses vasculaires sur les vaisseaux thyroïdiens ou faciaux.

Les techniques chirurgicales portant sur les ganglions sont plus standardisées. C'est la "dissection radicale" classique de telle loge ou telle région.

Les problèmes post-opératoires immédiats sont d'intérêt majeur et doivent être résolus au mieux pour la survie du patient.

La sécurité des voies aériennes exige souvent une trachéostomie provisoire. Une intubation nasogastrique, une oesophagostomie ou encore une hyperalimentation par voie veineuse, résolvent provisoirement les problèmes nutritionnels.

Les problèmes secondaires impliquent souvent l'équilibre moral ou psychique du patient. La reprise de la déglutition et de la phonation exige une rééducation qui peut être laborieuse. De plus, les techniques de chirurgie reconstructrice les plus raffinées peuvent ne pas être capables de résoudre tous les problèmes de chirurgie majeure d'exérèse. Après une planification adéquate, les mois qui suivent l'intervention primaire peuvent permettre de compléter la réhabilitation esthétique. Dans certains cas, chez les patients âgés ou au pronostic incertain, la prothèse maxillo-faciale résout sans agression supplémentaire les problèmes fonctionnels ou esthétiques en particulier au niveau de l'étage moyen de la face.

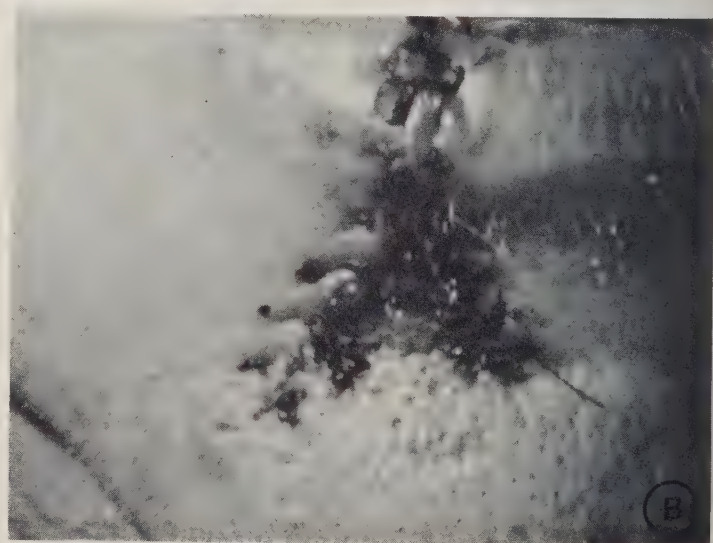
L'AVENIR DU PATIENT

Il reste toujours incertain et menacé sur plusieurs plans.

Il existe tout d'abord une possibilité d'échec du traitement qui se manifeste par une récurrence locale. Dans le cas des épithéliomas épidermoïdes, cet échec se manifeste en



Fig 3. A. Épithélioma épidermoïde de la lèvre inférieure: T₁ N₀ M₀.



B. Ce cas est traité par chirurgie seule. L'incision, en Y renversé, présentée ici aussitôt après l'opération, donnera un excellent résultat esthétique.



Fig. 4 A. Épithélioma épidermoïde de la mandibule et du plancher buccal: T₃ N₁ M₀. Le traitement chirurgical est ici très complexe: hémimandibulectomie élargie plus dissection radicale du cou...

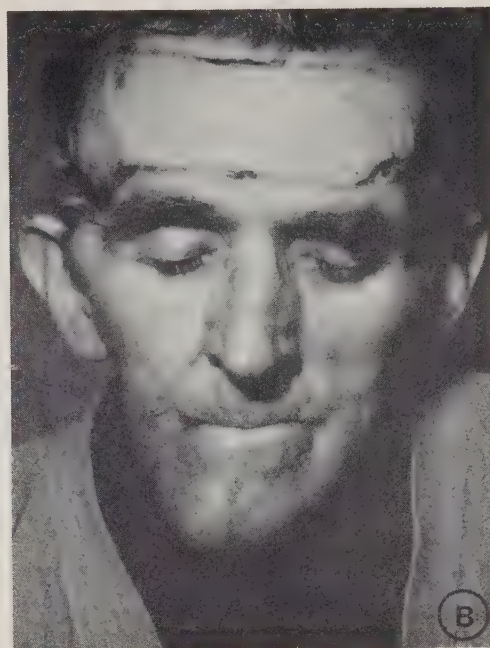
général rapidement, dans les 18 à 24 mois suivant l'intervention. Ces récives sont plus ou moins fréquentes. Leur probabilités sur 100 cas prévue par les statistiques varie suivant les localisations et le stade. L'épithélioma de la lèvre inférieure s'accompagne d'un pronostic excellent avec 95% de guérisons environ. Le pronostic est moins bon pour les lésions linguales. Il s'aggrave encore pour les épithéliomas du pharynx. Le stade, le grade influent aussi sur le pronostic.

Il existe, bien sûr, une certaine possibilité de "deuxième chance" thérapeutique, en général par une méthode non encore utilisée: radiations en cas de chirurgie préalable, chirurgie pour les échecs des radiations.

Il existe, de plus, une possibilité d'extension régionale au niveau des ganglions, dans les cas classés "N₀" (sans ganglion palpable), où aucun traitement n'avait été appliqué au niveau ganglionnaire. Si la découverte du premier ganglion secondairement hypertrophié est précoce et si la tumeur primitive est par ailleurs contrôlée, l'extension régionale peut être arrêtée par une dissection radicale secondaire "thérapeutique" ou "de nécessité".

Un "follow-up" vigilant du patient s'avère donc indispensable.

Il existe enfin une possibilité d'apparition ultérieure, éventuellement des années après guérison, d'un autre épithélioma, "métachrone", dans la région mais à une certaine distance du premier épithélioma. Il peut se déclarer du côté opposé par exemple, ou plus bas le long du tractus digestif. On peut observer ainsi un épithélioma du plancher buccal après guérison d'un cancer de la langue, un épithélioma du pharynx ou du sinus piriforme après guérison d'un épithélioma de la langue ou de l'amygdale, etc. . . On parle parfois d'épithéliomas successifs "étagés".



B... suivie d'une reconstruction extemporanée par lambeau frontal avec greffe libre de peau. Le patient a subi une cobalthérapie post-opératoire.

Une surveillance méthodique et rigoureuse de tels patients s'avère donc indispensable. Une visite s'impose chaque mois la première année, tous les 2 mois la deuxième, tous les 3 mois par la suite. De plus, ces sujets ont plus de chance que n'importe quel individu moyen de faire n'importe quel cancer n'importe où . . .

ÉCHECS ET TRAITEMENTS PALLIATIFS

La proportion et la probabilité des échecs dépendent de nombreuses variables qui sont entre autres: localisation, type histologique, traitement mis en oeuvre, âge du sujet, état immunitaire, etc. . .

L'échec de la "deuxième chance" thérapeutique ne donne recours qu'à la palliation. La chimiothérapie peut prolonger la survie (fig 4). La chirurgie pallie aux troubles fonctionnels à retentissement vital: trachéostomie pour éviter l'asphyxie; oesophagostomie ou gastrostomie pour permettre l'alimentation, etc. . . On aborde alors le problème des soins terminaux avec la nécessité d'une compréhension aiguë des besoins et des problèmes du patient.

Les efforts prophylactiques pour combattre les facteurs carcinogénétiques locaux, les efforts pour pousser la recherche fondamentale sur le plan de l'immunologie apporteront probablement la solution tant attendue au cancer. Actuellement, cependant, nos résultats thérapeutiques ne cessent de s'améliorer. Cette amélioration est possible grâce à certaines précautions: par le diagnostic et le traitement précoces des lésions cancéreuses, le traitement prophylactique des lésions pré-néoplasiques, enfin la surveillance rigoureuse du patient dans les années qui suivent le traitement. Dans tous les cas, le dentiste généraliste a un rôle primordial à jouer, et sa compétence et sa responsabilité devraient y être engagées.

RÉSUMÉ

Le traitement actuel des cancers de la cavité buccale est détaillé. Les méthodes de traitement du cancer en général, incluant la chirurgie, les radiations, la chimiothérapie, l'immunothérapie et l'hormonothérapie sont rappelées. Les idées de base en carcinologie bucco-pharyngée, la conduite du traitement, l'avenir du patient, les échecs et traitements palliatifs sont exposées suivant les concepts actuels de la cancérologie "tête et cou".

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Demandes de tirés à part: Dr. Franchebois.

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Ameloblastic fibro-odontoma: Report of a case

T.D. Daley, DDS
G.L. Lovas, BSc, DDS
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ABSTRACT

The ameloblastic fibro-odontoma is a rare odontogenic tumor which lies histogenetically between the ameloblastic fibroma and the odontoma. This report describes an ameloblastic fibro-odontoma occurring in the maxilla of a four-year-old Negro female. Although the lesion is uncommon, it should be included in the differential diagnosis of asymptomatic swellings of the jaws which present radiologically as well-circumscribed, mixed radiolucent and radiopaque lesions, especially in children.

Hooker is credited with separating ameloblastic fibro-odontoma from ameloblastic odontoma in a paper presented to the American Academy of Oral Pathology in 1967;^{1,2} although the published abstract of that paper is entitled "Ameloblastic odontoma:..."³

The lesion is a benign, encapsulated neoplasm which occurs centrally in the mandible or maxilla. It is a mixed tumor since ectodermal and mesodermal tissues of the odontogenic apparatus are involved in the neoplastic process. The tumor usually presents as a painless swelling of the jaw and occurs predominately in children and adolescents, with a slight predilection for males.^{4,7} It occurs in the mandible more often than in the maxilla, and is usually

found in the molar region.⁴ Radiographically, this neoplasm is a well-circumscribed radiolucency exhibiting irregular radiopaque foci of variable size and number within it.⁸ Occasionally, the calcified component predominates and the tumor resembles an odontoma. An impacted tooth is often associated with the expansile mass which may occasionally become relatively large and involve a significant portion of the mandibular ramus or maxillary sinus.²

Microscopically, the tissue from the neoplasm is characterized by the presence of bilayered strands of cuboidal to columnar epithelial cells which are often focally separated by cells resembling stellate reticulum. The stroma is composed of an immature fibrous connective tissue, resembling dental papilla. Variable amounts of calcified tissue including recognizable enamel, dentin and cementum as well as morphologically dysplastic forms of dentin and cementum, often resembling bone, are also present.

The lesions are treated surgically by curettage and recurrence is uncommon.^{2,6}

Slootweg⁴ studied the relationship of various mixed odontogenic tumors and concluded that the ameloblastic fibro-odontoma represents an immature form of complex odontoma, an opinion also expressed by Bornhoft.⁸ This concept, however, is not universally accepted.⁵



Fig. 1 — Lateral skull radiograph of patient with ameloblastic fibro-odontoma revealed a large well circumscribed radiolucency containing spotty radiopacities in the maxilla. The lesion obliterated the right antrum. The impacted second molar is located inferior to the infra-orbital plate.

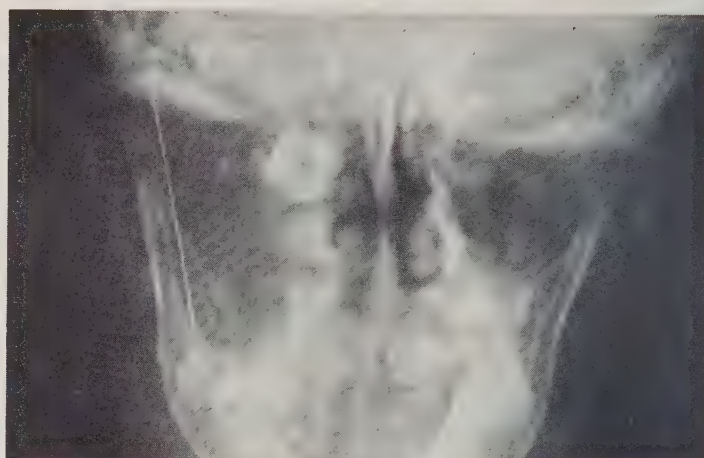


Fig. 2 — An antero-posterior radiograph of the patient with ameloblastic fibro-odontoma of the right maxilla. This radiograph shows the impacted tooth lying against the lateral nasal wall. Scattered radiopacities are evident within the radiolucency.

CASE REPORT

The patient was a four-year-old Negro female exhibiting marked swelling of the right maxilla. Radiographs revealed a well-circumscribed radiolucent lesion containing scattered radiopacities and an impacted second molar displaced superomedially to the lateral wall of the nasal cavity, just inferior to the infra-orbital plate (Figs. 1 and 2). The lesion was treated surgically and removed by curettage. Microscopic examination of the tissue revealed the presence of embryonal connective tissue characterized by plump spindle and stellate-shaped fibroblasts in a del-

icate collagenous ground substance. The epithelium consisted of bilayered strands of palisaded cuboidal to columnar cells exhibiting hyperchromatic nuclei, situated at the distal poles of the cells and cytoplasmic subnuclear vacuoles at the proximal poles of the cells (Fig. 3). Frequently a thick layer of hyalinized tissue separated the epithelium from the connective tissue. Focally, the epithelial strands were separated by cells resembling stellate reticulum (Fig. 4). Scattered calcified masses, some of which resembled cementum or bone, but others which resembled dentin, were sometimes associated with the organic matrix of enamel (Fig. 5).

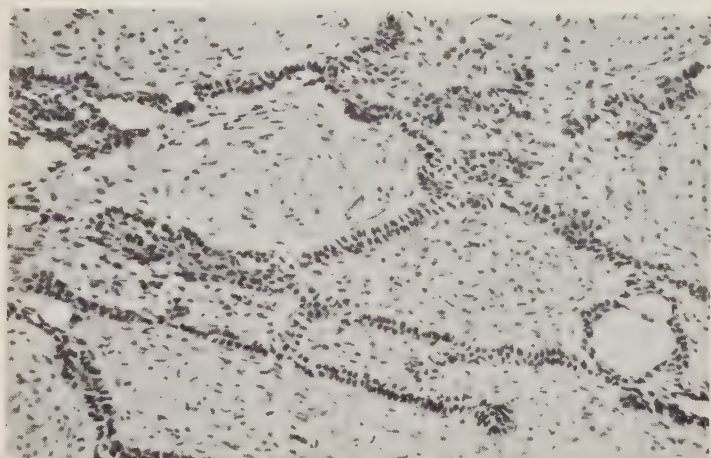


Fig. 3 — The soft tissue component of the ameloblastic fibro-odontoma is characterized by bilayered strands of columnar epithelial cells in an embryonal connective tissue resembling the dental papilla. Taken by itself, this morphologic picture is typical of ameloblastic fibroma. (Hematoxylin and eosin. Original magnification, X120).

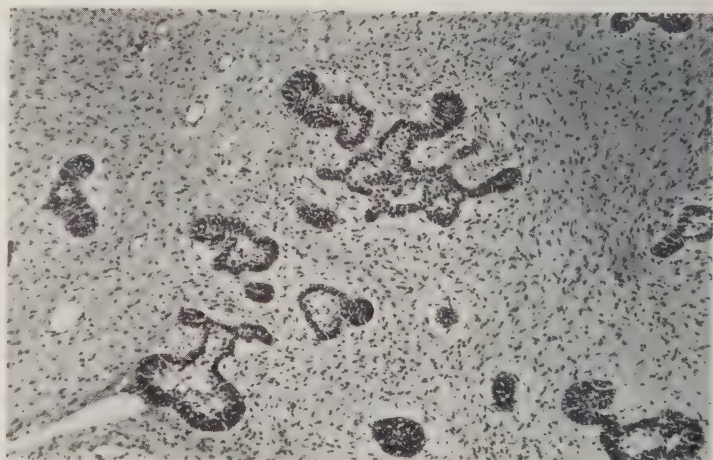


Fig. 4 — Other areas of soft tissue component of the ameloblastic fibro-odontoma showed islands of epithelium exhibiting a peripheral layer of columnar cells and centrally located stellate cells. (Hematoxylin and eosin. Original magnification, X100).

DISCUSSION

This four-year-old female presented with an asymptomatic maxillary swelling arising from a well circumscribed mixed radiolucent-radiopaque lesion associated with an impacted molar. The differential diagnosis for a lesion presenting in this manner should include: 1) odontoma 2) ameloblastic fibro-odontoma 3) adenomatoid odontogenic tumor 4) ameloblastic-odontoma 5) calcifying odontogenic cyst (COC) and 6) calcifying epithelial odontogenic tumor (CEOT).^{2,9,10}

Initially all of these lesions are manifested by a pure radiolucency and acquire mottled radiopacity with time. While the first four lesions predominantly occur under 20 years of age, and as young as six months, CEOT and COC are most frequently seen in older individuals.²

Only 1.3 per cent of biopsy specimens received by the oral pathology department at the University of Michigan proved to be odontogenic tumors. Of this small fraction, odontomas were by far the most common (67 per cent) while ameloblastic fibro-odontomas were rare (<2 per cent).¹⁰

The differential diagnosis includes a list of lesions sharing common clinical and radiographic features which must be subdivided into two groups as far as management is concerned. Odontoma, ameloblastic fibro-odontoma, adenomatoid odontogenic tumor and COC show a low recurrence rate following simple curettage while ameloblastic odontoma and CEOT have a biologic behaviour similar to ameloblastoma² and thus require wider excision with observation for recurrence.

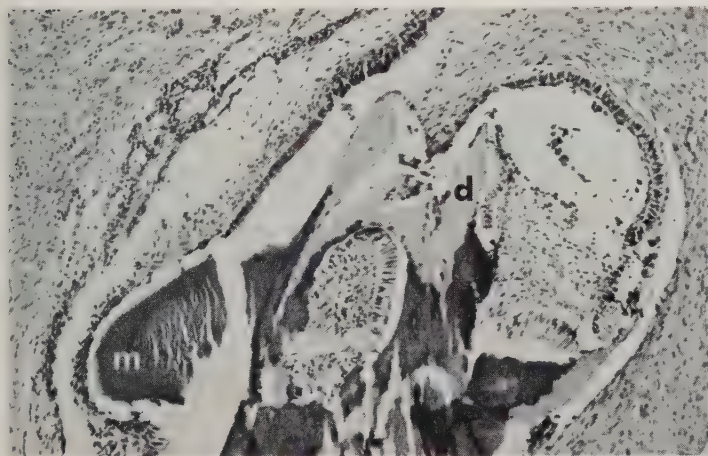


Fig. 5 — The calcified areas of the ameloblastic fibro-odontoma exhibited foci of enamel matrix (m) and calcified tissue resembling dysplastic dentin (d). (Hematoxylin and eosin. Original magnification, X55).

Ultimately, only histologic examination of biopsied or excised lesions, combined with clinical history and radiographs, will provide the definitive diagnosis. It is only on the basis of accurate diagnosis that the dental practitioner can base his treatment plan and prognosis.

SUMMARY

A case report of ameloblastic fibro-odontoma is presented and the differential diagnosis of this lesion is discussed.

ACKNOWLEDGEMENTS

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Announcements

CANADA

July/juillet

The Sixth Congress of the International Association of Dentistry for the Handicapped, Harbour Castle Hilton Hotel, Toronto, Ontario, July 20-25, 1982. Contact: The Programme Chairman, Sixth Congress I.A.D.H., Dept. of Paedodontics, Toronto, 124 Edward St., Toronto, Ont. M5G 1G6.

The Pan-Pacific International Symposium on Biomaterials, University of British Columbia, Vancouver, British Columbia, July 28-30, 1982. Contact: Dr. R.H. Roydhouse, Secretariat Biomaterials '82, 1704, 1200 Alberni St., Vancouver, B.C. V6E 1A6.

August/août

Second International Congress on Hospital Dental Practice, Four Seasons Hotel, Toronto, Ontario, August 26-29, 1982. Contact: Dr. C.O. Munro, Programme Chairman, 2nd International Congress on Hospital Dental Practice, 124 Edward Street, Toronto, Ont. M5G 1G6.

October/octobre

Western Society of Teachers of Oral Pathology Annual Meeting, Faculty of Dentistry, University of British Columbia, Vancouver, B.C., October 13-15, 1982. Contact: Dr. R.W. Priddy, Department of Oral Medicine, Faculty of Dentistry, University of British Columbia, 2199 Wesbrook Mall, Vancouver, B.C. V6T 1Z7.

Canadian Association of Oral and Maxillofacial Surgeons 1982 Scientific Session: Pre-Intra and Post-Operative Management of the Major and Maxillofacial Surgery Patient, Four Seasons Hotel, Toronto, Ontario, October 15-17, 1982. Contact: Dr. David M. Slavkin, Co-chairman, 1920 Weston Rd., Suite 209, Weston, Ont. M9N 1W4.

The Fourth Biennial Symposium on Occlusal Studies, Hyatt Regency Hotel, Vancouver, British Columbia, October 17-20, 1982. Contact: The Society for Occlusal Studies, 1729 South Douglass Road, Anaheim, California 92806, U.S.A. or The Director, Division of Continuing Dental Education, 2199 Wesbrook Mall, U.B.C., Vancouver, B.C. V6T 1Z7.

The Annual Meeting of the Canadian Academy of Endodontics, Four Seasons Hotel, Montreal, Quebec, October 22-24, 1982. Contact: Dr. Herb Borsuk, 4141 Sherbrooke St. W., Suite 515 Westmount, Que. H3Z 1B8. Phone: (514) 933-8424.

December/Décembre

The Toronto Academy of Dentistry Annual Winter Clinic, Royal York Hotel, Toronto, Ontario, December 6, 1982. Contact: Academy of Dentistry, 234 St. George St., Toronto, Ont. M5R 2P2. Phone: (416) 967-5649. **Please note change of day and date from previous years.**

Conference on Medical Device Technology in the 80's, Harbour Castle Hotel, Toronto, Ontario, December 6-8, 1982. Contact: Canadian Association of Manufacturers of Medical Devices, 480 Garyray Drive, Weston, Ont. M9L 1P8. Phone: (416) 745-9210.

International

July/juillet

Cours International sur la microchirurgie en médecine dentaire, Bordeaux, France, du 5-7 juillet 1982. C'est un cours d'initiation sur l'utilisation du microscope en dentisterie conservatrice, endodontie, prothèse fixe, périodontie. Inscription: 1600 francs. Contacté: Secrétariat du cours de microchirurgie O.S., Fondation Portmann, 114 avenue d'Arès, 33000 Bordeaux, France.

Academy of General Dentistry's 30th Annual Meeting, The Sheraton-Boston Convention Complex, Boston, Mass., July 10-14, 1982. Contact: AGD, 211 E. Chicago Ave., Suite 1200, Chicago, IL 60611, U.S.A.

The New Zealand Dental Association's 11th Biennial Conference, Rotorua, New Zealand, July 17-23, 1982. Contact: New Zealand Dental Association, 238 Remuera Road, P.O. Box 28 084, Auckland 5, New Zealand.

September/septembre

The 13th International Cancer Congress, Seattle, Washington, September 8-15, 1982. Contact: Congress Office, Suite

1800, Fourth and Blanchard Building, Seattle, WA 98121, U.S.A. Phone: (206) 621-9440.

The seminar "Tomorrow's Dentistry Today" sponsored by the Alpha Omega Foundation and the Friends of the Hebrew University, Grand Hyatt Hotel, New York City, U.S.A., September 11-12, 1982. Contact: Dr. Seymour Evans, Chairman, Alpha Omega Conference, 225 Westchester Ave., Port Chester, N.Y. 10573, or call Tricia Collins (212) 840-5840.

Asociacion Argentina de Ortopedia Funcional de Los Maxilares, 25th Anniversary, Buenos Aires, Argentina, September 19-23, 1982. Contact: Dr. S.A. Gandolfo, Secretario, Asociacion Argentina de Ortopedia Funcional de Los Maxilares, Buenos Aires, Argentina.

"Orthodontics for the General Practitioner", a dental seminar sponsored by UBC's Faculty of Dentistry and the School of Dentistry, Oregon Health Sciences University, London, England, September 24 - October 2, 1982. Contact: Continuing Ed. in the Health Sciences, #105-2194 Health Sciences Mall, UBC, Vancouver, B.C. V6T 1W5.

October/octobre

Third International Dental Congress on Modern Pain Control, Tokyo, Japan, October 3-6, 1982. Contact: Third International Dental Congress on Modern Pain Control, c/o Japan Convention Services Inc., Nippon Press Center Building, 2-1, Uchisaiwai-cho 2-chome, Chiyoda-ku, Tokyo 100, Japan.

The 68th Annual Meeting of the American Academy of Periodontology, Disneyland Hotel, Anaheim, California, October 6-9, 1982. Contact: American Academy of Periodontology, 211 East Chicago Avenue, Room 924, Chicago, Illinois 60611.

The American Dental Association's President's Conference on Dentist/Patient Relations and Managing Patients' Fears, Anxieties and Pain, ADA Headquarters, October 8-9, 1982. Contact: Dr. William Ayer, Bureau of Economic and Behavioral Research, ADA, 211 East Chicago Avenue, Chicago, Illinois.

Fédération Dentaire Internationale, 70th Annual World Dental Congress, Vienna, Austria, October 11-16, 1982.

Second International Symposium on Overdentures, San Antonio, Texas, October 15-17, 1982. Contact: Dr. K.D. Rudd,

Announcements

Associate Dean for Continuing Dental Education, University of Texas Health Science Center at San Antonio School, 7703 Floyd Curl Dr., San Antonio, Texas 78284. Phone (512) 691-7451.

November/novembre

Consensus Development Conference on Clinical Applications of Biomaterials, National Institutes of Health, Bethesda, Maryland, November 1-3, 1982. Contact: John W. Boretos, Building 13, Room 3W13, National Institutes of Health, Bethesda, Maryland 20205.

The American Academy of Implant Dentistry's 31st Annual Educational program IMPLANT UPDATE, Las Vegas, Nevada, November 1-6, 1982. Contact: AAID Central Office, 515 Washington Street, P.O. Box 2, Abington, Massachusetts 02351. Phone: (617) 878-7990.

The 123rd Annual Session of the American Dental Association, Las Vegas, Nevada, November 6-9, 1982. Contact: ADA Council on International Relations, 211 East Chicago Avenue, Chicago, Illinois 60611. Phone: (312) 440-2726.

International Congress of the Association Dentaire Francaise, Palais des Congres, Paris, France, November 23-27, 1982. Examining the two main aspects of professional activity — Preventive Dentistry & Therapeutic Care. Simultaneous interpretation in English, French and German will be available during the main scheduled events. Contact: Dr. Guy Roberts, Secretary-General, 92 avenue de Wagram, 75017 Paris, France.

British Dental Association — Metropolitan Branch, First International Prosthodontic Symposium, Royal Lancaster Hotel, London, England, November 25-27, 1982. Contact: Dr. M. Seymour, Programme Co-ordinator, 22 Devonshire Place, London W1N 1PD, England.

December/Décembre

The Sri Lanka Dental Association's 50th Anniversary, Colombo, December 4-6, 1982. Contact: Dr. L.S.W. Dassanayake,

Chairman, Organising Committee, Sri Lanka Dental Association, Professional Centre, 275/5, Bauddhaloka Mawartha, Colombo 7, Sri Lanka.

The Barbados Dental Association's 2nd Convention for The Caribbean Atlantic Regional Dental Association in conjunction with the Institute for Further Education, Barbados, W.I., December 5-8, 1982. Contact: Dr. Bernard Tuckman, 720 North Park Ave., Easton, Connecticut 06612, U.S.A.

The 37th Indian Dental Conference, Bangalore, India, December 26-29, 1982. Contact: Dr. Pradip Jayna, Hon. General Secretary, M-75, Connaught Circus, New Delhi-110001, India.

1983+

The "Kieferorthopadische Fortbildungstagung in Kitzbuhel" meeting, Kitzbuhel/Tyrol, Austria, January 30- February 5, 1983. Contact: Medizinische Ausstellungs- und Werbegesellschaft, Maria Rodler & Co., A-1014 Wien I, Freyung 6, Postfach 155.

9th Congress of Dentistry for Children, Wenworth Melbourne Hotel, Australia, February 21-24, 1983. Contact: Dr. Roger K. Hall, Royal Children's Hospital, Parkville, 3052, Victoria, Australia.

International Conference of Dental Surgeons, Rawalpindi/Islamabad, Pakistan, March 22-26, 1983. Contact: Chairman, Organizing Committee, Armed Forces Institute of Dentistry, Rawalpindi, Pakistan.

The First International Congress on Dentistry, Medical Law & Ethics, Tel Aviv, Israel, April 11-15, 1983. Contact: Dr. Shmuel Perlmutter, The International Congress on Dentistry, Medical Law & Ethics, P.O. Box 394, Tel Aviv 61003, Israel.

First International Symposium on Periodontics and Restorative Dentistry, Sheraton-Boston Hotel, Boston, Massachusetts, April 28-30, 1983. Contact: Kim Vander Steen, Quintessence Publishing Co., Inc., 8 S. Michigan Avenue, Suite 2301, Chicago, Illinois 60603. Phone: (312) 782-3221.

The Canadian Association of Oral and Maxillofacial Surgeons Meeting, Vancouver, British Columbia, June 3-6, 1983. Contact: Dr. Brian M. Abrams, Secretary, Canadian Association of Oral & Maxillofacial Surgeons, 410 - 11012 MacLeod St.S., Calgary, Alta. T2J 6A5.

The 5th Canadian Congress of Dentistry for Children, Westin Hotel, Calgary, Alberta, July 1-3, 1983. Contact: Dr. Jack A. Derbyshire, 496-115-9th Avenue S.E., Calgary, Alberta T2G 0P5. Phone: (403) 262-7000.

Canadian Dental Association, 1983 National Convention, Vancouver, British Columbia, September 25-28, 1983.

Fédération Dentaire Internationale, 71st Annual World Dental Congress, Tokyo, Japan, November 14-20, 1983. Contact: Japan Dental Association, 1-20, Kudan-Kita 4-chome, Chiyoda-ku, Tokyo 102, Japan.

The 38th Indian Dental Congress, Cochin, India, December 29, 1983 - January 1, 1984. Contact: Dr. Pradip Jayna, Hon. General Secretary, M-75, Connaught Circus, New Delhi-110001, India.

Canadian Dental Association, 1984 National Convention, Montreal, Quebec, April 8-12, 1984. Contact: Dr. Morton Lang, O.D.Q., 3565 Berri St., Suite 200, Montreal, Que. H2L 4G3. Phone: (514) 842-9112.

Fédération Dentaire Internationale, 72nd Annual World Dental Congress, Helsinki, Finland, August-September, 1984.

Canadian Dental Association, 1985 National Convention, Ottawa, Ontario, September 29-October 2, 1985.

The 1988 IADR/AADR Meeting, Montreal, Quebec. Hosted by the Canadian Division.

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BRITISH COLUMBIA — Victoria. For sale: Long established practice showing good gross and net. Reasonable rent in downtown office building. Two operatories. Dentist retiring. Please contact CDA Box Number 2118.

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ALBERTA — Edmonton. For sale: Established downtown preventive practice. Partner in four member group practice returning to graduate school. Office located in modern professional building. Each partner has two fully equipped operatories and the use of multiple hygiene facilities. Phone: (403) 423-2408 (business) or 436-0368 (residence).

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THE UNIVERSITY OF WESTERN ONTARIO — Faculty of Dentistry. Applications are invited for the position of Chairman of the Department of Oral Medicine, Faculty of Dentistry, The University of Western Ontario. A licence to practise dentistry in Ontario and extensive professional and teaching and research experience in one or more of the following disciplines are required: Oral Medicine, Oral and Maxillofacial Surgery, Oral Radiology, and Periodontics. The Department also includes a Division of Hospital Dentistry. There are nine full-time and thirty part-time members of the faculty. Salary is negotiable. Applications may be sent, prior to October 1, 1982, to The Chairman, Selection Committee for Chairman of the Department of Oral Medicine, Faculty of Dentistry, The University of Western Ontario, London, Ont., Canada N6A 5B7. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

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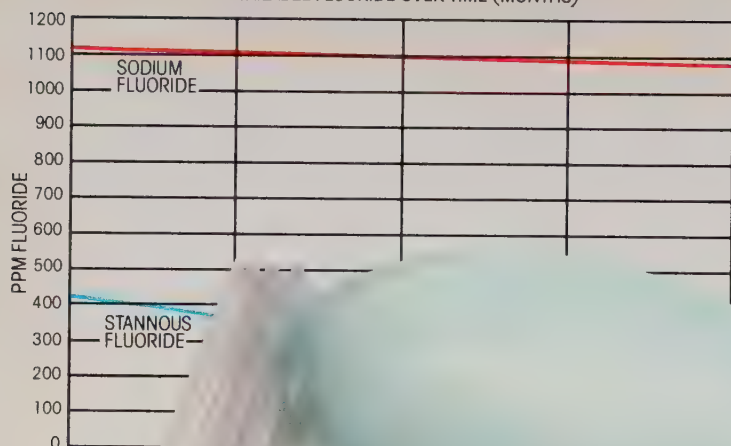
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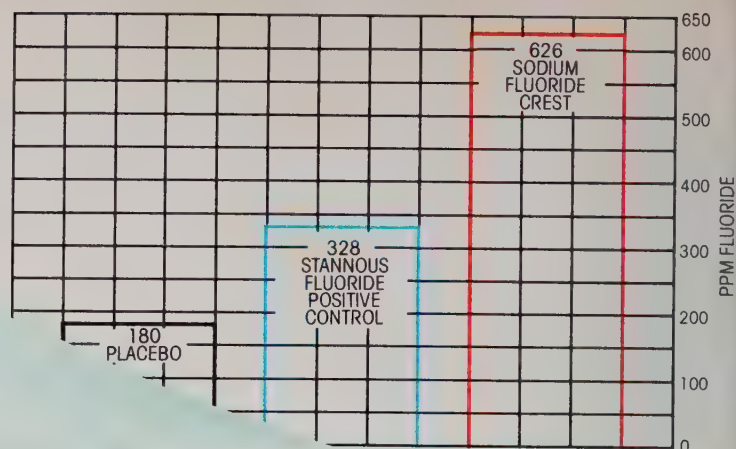
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1. Zacherl, W.A.: Pharm Therap Dent, 6:1-7, 1981.
2. Beiswanger, B.B., Gish, C.W., Mallatt, M.E.: Pharm Therap Dent, 6:9-16, 1981.
3. Data on file at Procter & Gamble Inc.
4. Mobley, M.J.: J Dent Res, 60 (12):1943-1948, 1981.
5. Arends, J., ten Cate, J.M.: J Cryst Gro, 53:135-147, 1981.
6. Silverstone, L.M.: Caries Res, 11 (Suppl. 1):59-84, 1977.
7. Ostrom, C.A., et al: J Dent Res, 56(3):212-221, 1977.
8. Zahradnik, R.T.: J Dent Res, 59(6):1065-1066, 1980.



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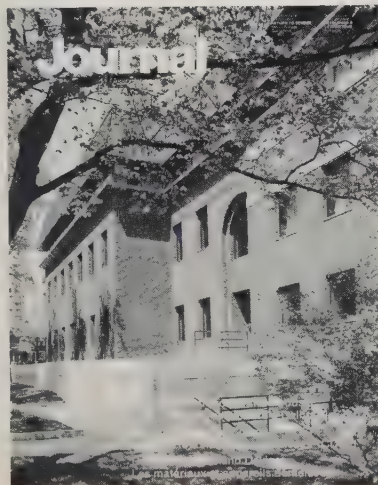
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and Devices**Editorial**

- 479 Dr. C.O. Munroe says a surprising number of general practitioners now hold hospital staff appointments.

Letters

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The CDA has conducted, and continues to conduct, an intense lobby to fight the proposed tax on dental health plan premiums. An exchange of correspondence between CDA President Dr. Donald E. Williams and Finance Minister Allan MacEachen illustrates the issue.
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Responses to the letter from Dr. John Stamm by Drs. Tam You-Cheuk, Robert F. Harvey and E.C.S. Chan, defending their scientific paper.

- 488 **'Dental Milk'**
Dr. Steven Malo questions the logic of the letter about "dental milk."

In the News

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Drs. Donald E. Williams, president of the CDA and Hazlett Saunders Crosby, a dentist, teacher and soldier, received honorary Doctor of Laws degrees.
- 494 **ODQ may test legality of Quebec's transfer of dental duties to hygienists**
L'Ordre des dentistes du Québec may challenge recent Québec government regulations.
- 495 **Fluoridation issue becomes political.**
Although fluoridation officials know fluorides are safe and effective, they must understand that the matter becomes political when a vote is called.
- 496 **Continuing Education**
Courses beginning this fall at several of the faculties of dentistry and other locations.
- 499 **Newfoundland dental plan cuts annoy Dental Association**
When the Newfoundland government recently cut back dental health services for children it didn't consult the province's dental association.

Brig.-Gen. James N. Wright named Director-General of Dental Services

Brig.-Gen. Wright succeeds Brig.-Gen. William Thompson, CDA's President-Elect.

- 500 **New Saskatchewan Health Minister pledges consultation**
Health Minister Graham Taylor tells the College of Dental Surgeons of Saskatchewan that he will "actively seek your advice."

- 502 **The Real World of Claims**
The first in a series from CDSPI provides information about actual claims — human interest stories in themselves.

- 504 **NDHM poster contest winners announced**
Girls won in all three categories in the 1982 National Dental Health Month poster contest.

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Dental news items from Canada and around the world.

- 509 **CDA Resource Centre**
Current articles available from the CDA Library on the subject of Dental Materials and Techniques are listed.

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- 521 **Temporo-Mandibular Joint Function and Dysfunction**
"While this book gives a comprehensive coverage of the subject and is an excellent source of references, its appeal is more likely to be to the members of dental specialties." — Ken Kerr.
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- Clinical Oral Pediatrics**
"This text is most applicable to the non-dental health professionals to help them realize the dental implications in the treatment of various diseases." — Julian S. Geller.

Scientific

- 523 **Standards for Dental Materials and Devices**
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Cover Photo: Courtesy of the Division of Instructional Resources, Faculty of Dentistry, Dalhousie University, Halifax, N.S.

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Journal

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Canadienneaoût
1982

Editorial

- 480 À cause des nouveaux besoins, un nombre surprenant de dentistes occupent des postes d'administration dans les hôpitaux.

Lettres

- 489 L'ADC continue à faire des pressions auprès du gouvernement fédéral pour que sert abandonné le projet visant à prélever un impôt sur les primes des régimes d'assurance dentaire. Le président de l'ADC, le Dr D.E. Williams, et le ministre des Finances, M. Allan MacEachen, se sont écrit à ce sujet.

516 Le gouvernement fédéral désire contrôler les programmes de santé

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517 Restrictions apportées au programme dentaire de Terre-Neuve

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512 L'ODQ conteste une décision du gouvernement québécois.

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513 Nomination du brigadier-général Wright.

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- 514 Deux dentistes des Maritimes a l'honneur l'Université Dalhousie a décerné des doctorats honorifiques au président de l'ADC le Dr D.E. Williams, et au Dr Hazlett Saunders Crosby, qui est dentiste, professeur et soldat.

515 La fluoruration: un débat plus politique que scientifique

Bien que la fluoruration soit maintenant considérée comme une mesure sûre, les praticiens généraux doivent comprendre que le débat se situe sur le plan politique quand il s'agit de voter pour ou contre.

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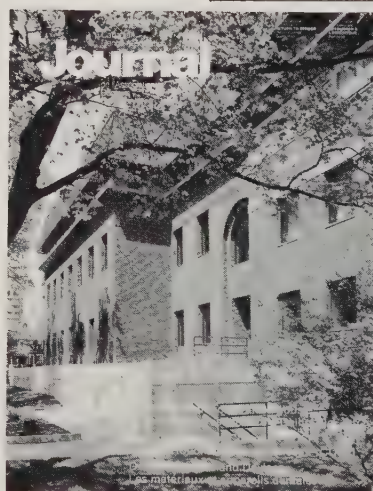
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Le Dr Williams est honoré à Dalhousie

La vérité touchant les assurances — CDSPI

Les matériaux et appareils dentales

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La direction du Journal ne partage pas nécessairement les opinions qu'expriment ses collaborateurs à moins que l'Association Dentaire Canadienne ne les ait adoptées officiellement.

HOSPITAL DENTISTRY — COMING OF AGE

Over recent years, hospital dentistry has seen a considerable development, although this has occurred mainly in the larger urban centres, especially where these are associated with university dental faculties. Besides the larger departments of dentistry in teaching hospitals, it is surprising how many general practitioners in the country hold hospital staff appointments. This is a reflection of community needs and pressures.

It is now being realized more clearly, both within dentistry and medicine, that a large group of patients is in need of dental care which may not be given safely or, in some cases, adequately, in the private office. The medically compromised, the mentally or physically handicapped, the serious dental emergencies, such as infections or trauma and the patient requiring major oral surgery all ideally require the hospital for their treatment.

The increasing complexity of medical care and therapeutic regimes can make it difficult to treat a patient in an ideal fashion in a clinical environment far from the possibility of consultation or immediate medical assistance. In this respect, it may be quite surprising to the non-hospital affiliated dentist to know how many patients with purely dental problems pass through the intensive care units of the larger general hospitals.

Besides the obvious community needs, many of the hospital dental departments are involved in education activities. The increasing number of dentists being trained in general residency programs as well as general practitioners taking up staff appointments is producing a breed of practitioner better able to deal with the problems presented by the medically compromised.

While many such patients need the hospital for their dental treatment, the majority, of course, can be treated

safely in the general dental practice provided adequate safeguards have been taken.

Spending twelve months of intensive clinical dentistry in a hospital setting is an ideal experience for any general practitioner at the start of his career. It is also considered to be a sound base for post-graduate study and is reflected in the growing interest, both here and abroad, of the young graduate in such programs.

With this growing interest in the practice of dentistry in the hospital, both from a service aspect and an educational aspect, it is no coincidence that there has developed a need for people concerned in this specialized area to meet and exchange experiences.

Such a forum has developed on an international basis — the International Congress on Hospital Dental Practice. The first meeting of this body was held in New York four years ago and was highly successful.

This year, the Second Congress is scheduled. It will be held in Toronto, August 26 — 29. It will focus on the needs of the profession in Canada.

For the dentist who is already affiliated to a hospital department or has an interest in this type of work, this will be a unique opportunity which will not be repeated in the near future in Toronto, or indeed, in Canada.

*C.O. Munroe,
Toronto, Ont.*

Dr. Munroe is Professor and Chairman of the Department of Oral Medicine and Pathology, Faculty of Dentistry, University of Toronto, and also Dental Surgeon-in-Chief at Mount Sinai Hospital, Toronto, Ontario.

LA DENTISTERIE HOSPITALIÈRE — UNE SPÉCIALITÉ RECONNUE

Au cours des dernières années, la dentisterie dans les hôpitaux a fait des progrès remarquables. Il est vrai que ce phénomène se manifeste particulièrement dans les grands centres urbains, surtout lorsque l'hôpital est affilié à l'école dentaire d'une université. Outre les importants services de dentisterie des centres hospitalo-universitaires, il est surprenant de constater le nombre de praticiens généraux qui, au Canada, occupent des postes administratifs dans les hôpitaux. Il faut voir là le reflet des besoins et des demandes pressantes exprimés par le public.

Présentement, les dentistes et les médecins comprennent mieux pourquoi de nombreuses personnes ont besoin de soins dentaires qu'elles ne peuvent recevoir sans danger et, dans certains cas, de façon adéquate, dans les cabinets privés. Les grands malades, les handicapés physiques et mentaux, les cas urgents qui ont des problèmes dentaires sérieux exigent idéalement d'être soignés dans un hôpital.

Parce que les soins médicaux et les procédés thérapeutiques se compliquent de plus en plus, il peut être difficile de traiter convenablement un patient dans une clinique où on ne peut consulter un médecin ou recourir à des services médicaux immédiats. À cet égard, le dentiste qui ne travaille pas dans un hôpital sera sans doute assez étonné d'apprendre que de nombreux patients ayant uniquement des problèmes dentaires doivent être traités dans un service de réanimation.

En plus de répondre aux besoins ordinaires du public, plusieurs services dentaires hospitaliers s'occupent d'enseignement. De plus en plus de dentistes y font leur internat et des praticiens généraux y remplissent des postes administratifs. Aussi sont-ils mieux qualifiés pour s'occuper des problèmes des malades.

Bien que certains patients doivent aller à l'hôpital pour leurs traitements dentaires, il va de soi que la majorité peut

être soignée sans danger par le praticien général, pourvu que certaines précautions soient prises.

Un an passé en réanimation dans un service dentaire hospitalier constitue une excellente expérience pour tout praticien général qui entreprend sa carrière. Cette expérience est également valable pour les diplômés qui désirent pousser leurs études plus avant. C'est pourquoi, au Canada comme à l'étranger, les jeunes diplômés s'intéressent davantage à de tels programmes.

Étant donné que l'intérêt pour la dentisterie hospitalière s'accroît tant du point de vue professionnel que du point de vue pédagogique, ce n'est pas un hasard si les gens qui s'intéressent à ce domaine de spécialisation éprouvent le besoin de se réunir et de partager leurs expériences.

Aussi une assemblée internationale s'est-elle imposée qu'on a appelée le Congrès international de dentisterie hospitalière. Le premier a eu lieu à New York il y a quatre ans et a obtenu un immense succès.

Cette année, le Deuxième Congrès se tiendra à Toronto du 26 au 29 août et se penchera sur les besoins de la profession au Canada.

Pour le dentiste qui est déjà attaché à un service hospitalier ou qui s'intéresse à ce genre de travail, ce congrès constitue une occasion unique qui n'est pas susceptible de se répéter avant longtemps à Toronto ni même au Canada.

*C.O. Munroe
Toronto, Ontario*

Le Dr Munroe est professeur et président de la Division de médecine buccale et de pathologie, à la Faculté dentaire de l'Université de Toronto. De plus, il est chirurgien dentaire principal à l'hôpital Mount Sinai, à Toronto.

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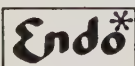
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Reference

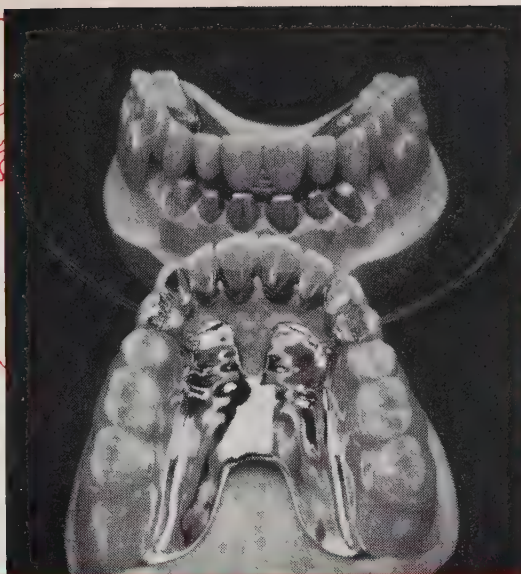
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Lobby against taxation of health plan premiums

Editor's preface: *When the Nov. 12 (1981) federal budget was announced, advising Canadians that health care plan premiums paid by employers would be taxed, CDA President Dr. Donald Williams immediately responded to Finance Minister Allan MacEachen, stating that the tax measure would be "potentially very injurious to the oral health of Canadians who may now drop this health benefit plan..."*

"Dental insurance," he said, "is only affordable when it is marketable to large groups. If dental premiums are to be taxed, our concern is that the numbers involved in dental insurance plans will drop, premiums will increase, and thus will result in a reduction in the number of people with access to preventive dental care and at the same time sacrifice the very cornerstone of modern dental treatment."

Further, he said, "any proposal designed to potentially reduce the availability of dental insurance plans and discourage the public from seeking regular dental care can have serious effects on the health of the Canadian public."

Letter, Dr. D.E. Williams, Canad Dent Assoc J. 48: 75 1982.

Finance Minister MacEachen replied as follows:

Thank you for your correspondence concerning the budget proposal to include medical and dental benefits paid for by employers in the income of employees for tax purposes.

In the recent budget, I proposed that a number of previously available tax incentives, deductions and preferential treatments of income be cut back or eliminated. The resulting revenue gain has been used to lower tax rates generally to the benefit of all Canadians. Some 12 million Cana-

dians will benefit from the changes in the marginal tax rates, along with the changes in the federal tax credit and indexation.

When employers pay the contributions to a private health and dental plan, the employees covered are provided a benefit. Not all Canadians receive such a benefit and thus many, such as the self-employed not covered by a dental or health plan, or retired Canadians, have to meet their extra health and dental care costs out of fully taxable income. For many years, employer contributions to provincially administered health plans have been a taxable benefit to employees. In these circumstances, I believe it is fair that the benefit provided by health and dental plan contributions of employers be taxable.

I would note, however, that many Canadians affected by the measure will, on balance, gain as a result of the tax rate cuts proposed in the budget. The value of these tax reductions, and the ability of many married taxpayers to claim an additional \$200 tax credit in respect of their dependent spouse will often more than offset the additional tax on the health and dental plan benefits.

Allan J. MacEachen

Dr. Williams replied to this as follows:

We acknowledge receipt of your correspondence dated April 28. It is with some concern that we send this further response to you.

Upon reviewing your reply that the letter does not answer the issues raised in our brief presented to you on January 21, 1982.

Even the comments made in your response are to a great extent not valid and as a supplement to our still outstanding comments in our submission of January 21, 1982 we wish to query a number of the statements made in your letter.

You suggest that the elimination of

certain tax incentives, deductions and preferential treatments of income would be more than outweighed by the benefits received by taxpayers in adjustments to the tax rates and the Federal Tax Credit. Most of the people who would be adversely affected by the taxation of private dental plan benefits would be in the lower and middle income brackets. The tax rates applicable to those income brackets have not been reduced. The view that indexing the tax brackets represents a reduction in tax is only valid if one assumes that the "normal" or "proper" approach is to permit tax to increase merely as a result of people's maintaining pace with the rate of inflation. In addition, the benefits of reductions in tax rates and indexing are much more significant for income levels above fifty thousand dollars (\$50,000) per year.

It is fallacious to say that the changes in the Federal Tax Credit will compensate those people who will be subjected to increased taxation as a result of the taxability of private dental plan benefits.

The fact is that the changes to the Federal Tax Credit will adversely affect taxpayers in most situations. The effects of the changes in the Federal Tax Credit for a various groups are as follows:

1. For two (2) income families where both spouses earn more than twenty-seven thousand, four hundred and eight dollars (\$27,408) in taxable income, the proposed federal tax credit will be four hundred dollars (\$400) whereas previously it would have been one thousand dollars (\$1,000).
2. For two (2) income families where both spouses are earning over sixteen thousand, eight hundred, ninety dollars (\$16,890), each earner loses an amount equal to nine percent (9%) of his or her federal taxes until twenty-seven thousand, four hundred, eight dollars (\$27,408) is reached. The loss may range from just a few dollars to a combined six hundred dollars (\$600).

3. Single taxpayers with taxable incomes between sixteen thousand, eight hundred, ninety dollars (\$16,890) and twenty-seven thousand, four hundred, eight dollars (\$27,408) will have their Federal Tax Credit reduced by up to three hundred dollars (\$300).
4. Middle income people with non-earning spouses may be somewhat better off or moderately adversely effected. At twenty-two thousand, seven hundred, seventy-eight dollars (\$22,778) of taxable income, the maximum four hundred dollar (\$400) credit under the proposed formula would be available. Any married taxpayer with a non-earning spouse and with taxable income below this figure would be somewhat better off under the proposal. Where taxable income exceeds that figure the taxpayer would be a loser to a maximum of one hundred dollars (\$100) when taxable income reached twenty-seven thousand, four hundred, eight dollars (\$27,408).

Thus, the major burden will be felt by two (2) worker families who are most commonly found among lower and middle income groupings. These incidentally are also the groups that are not benefited from the rate schedule changes.

While you indicate that contributions to private health and dental plans by employers are not received by all Canadians, there is a very significant proportion of the Canadian tax paying public that are in receipt of these benefits and would be adversely affected by the proposal. Apart from personal exemptions, there is no provision in the Income Tax Act that affects all taxpayers. It is our submission that the health and dental plan provision affects as large a proportion of taxpayers as virtually any other provision of the Act. The fact that employer contributions to provincially administered health plans have been taxable benefits to employees ignores the fact that a very significant part of the cost of provincial health plans is not covered by premiums but

is covered by general tax revenues. With private health and dental plans, the entire cost of such care is funded through premiums.

We also wish to point out that one of the real results of the increased taxability will likely be the cancellation of such private plans by many employers. Thus, employees not previously covered by dental plans will receive no benefits from this proposed change. On the other hand, the level of dental care made available to the employees currently covered by such private dental plans will decline markedly with long term real social costs and financial costs to the health care structures in Canada.

We note that a number of changes to proposals initially made on November 12th have already been proposed by the Department of Finance. We submit that the arguments presented in our letter of January 21, 1982 and herein compel an equally dramatic reevaluation of the dental plan proposal which effect so many of the tax paying and electoral public.

Dr. D.E. Williams

President of the

Canadian Dental Association

Editor's footnote: *Dr. Williams told CDA members at the joint CDA/ODA Convention in Toronto in May that CDA has conducted and maintained "an intense lobby to fight the proposed tax on dental premiums. We do not want that lobby action to diminish."*

Since that time, and in view of the fact that the June 28 budget speech did not change the federal government's intent, Dr. Williams reiterated his appeal to members "to write the Minister of Finance... to protest the tax... If you have already written him, I thank you, but I ask you to write again. We must keep the pressure on, so that the government is clearly aware that we really do care, on behalf of all Canadians."

A copy of the above exchange of correspondence has been sent to every Member of Parliament, to alert the House of Commons of CDA's position.

Authors respond to Dr. Stamm's letter

I am writing to comment on the letter of 22nd April to you from Dr. John Stamm on our paper published in the Journal (Feb., 1982). Most of the points stated by Dr. Stamm have been responded to by the co-authors of the paper. However, I would like to make additional comments on the following points.

Point 2

There is no reason to believe that pathogenic microorganisms are found exclusively in a diseased site but not in a healthy site only a few mm away. Therefore, we attempted to determine the prevalence of the microorganisms in question in diseased and healthy mouths but not sites. To do this, we collected samples from two dissimilar sites and calculated the percentage of active bacteria of each mouth. Weighting of each site was not necessary from this point of view.

Point 3 and Point 4

Dr. Stamm stated that there is a correlation between chondroitin sulfatase-producers and hyaluronidase producers. This is no surprise to us because it is known that mucopolysaccharidases have different substrate specificities. Some enzymes degrade only chondroitin sulfate, some only hyaluronate while the majority both. Further analysis of the majority of bacterial strains isolated indeed showed that they produced enzymes that degrade both substrates. We have proven this in subsequent work by biochemical methods rather than by statistical analysis. We have never claimed a bivariate relationship for the two reported correlations with additive predictive value.

In conclusion, I wish to say that our report contains no flaws and that the conclusions in it are valid. The divergent opinion expressed by Dr. Stamm

is due to incomplete knowledge of the pathogenesis of periodontal disease at the present time. Blind adherence to conventional approach in research can only hinder professional and scientific advance.

*Dr. Tam You-Cheuk
Department of Microbiology
and Immunology
McGill University*

I wish to reply to the letter of the 22nd April to you from Dr. John Stamm, McGill University on his "comment(s) on the paper by Tam et al (Y.-C. Tam, R.F. Harvey, and E.C.S. Chan) entitled, Chondroitin Sulphatase-producing and Hyaluronidase-producing Oral Bacteria Associated with Periodontal Disease, which appeared in the February issue of the Journal." As the clinician involved, I will confine my comments to his points 1 and 4, leaving others in the field of microbiology to reply as they desire. I regret having to even acknowledge his "critique," but Dr. Stamm's attack on his confreres and The Journal leaves me no alternative.

Point 1, Paragraph 1—Classification.

The classification used is based on that accepted by the American Academy of Periodontology and generally used in all dental schools:

I Control

- a) no gingivitis
- b) mild/moderate gingivitis

II Periodontitis

- a) early
- b) moderate

Selection sites for sampling

As a clinician, site 1, the mesiolabial of the maxillary left first bicuspid was selected as this is an area frequently kept relatively plaque-free by most patients, while the distolingual of the mandibular right first molar, site 2, (or the second molar if necessary) is notoriously difficult for the vast majority of patients to keep plaque-free. The selection of these sites was approved by a former member of The Department of Community Dentistry.

Point 1, Paragraph 2

Dr. Stamm states in part, "...It

is possible to contemplate patients with considerable past periodontal treatment, who are now in a good maintenance state. Such patients *would* (underlined by me) be categorized as diseased based on the authors' use of 'obvious periodontal destruction' as the classification criterion. Since such patients are now in an acceptable maintenance state, there is no reason to postulate the sort of microbial activity generally associated with progressing disease."

The object of the study was to ascertain whether there is any correlation between clinical "impressions" and bacterial findings. The clinician (the author of this reply) involved in the classification of patients, based on more than forty years of clinical experience should be reasonably qualified to determine from a clinical and radiographic examination whether the patient's gingival/periodontal condition is in a state of health or disease, particularly when one considers that the classification is based on that presently used throughout most of North America. The existence of a patient with past periodontal disease, since treated and with the condition arrested, would most certainly be excluded from the list of patients with active periodontal disease.

I am fully aware that there is at present no clinically scientific method of knowing whether we are looking at an active or arrested condition and that the diagnosis arrived at is subjective, but then, that is what the experiment is all about: to determine whether the numbers of chondroitin sulphatase-producing and hyaluronidase-producing oral bacteria are in any way directly related to the clinician's assessment of the situation. It is recognized that we are coming close to methods which show promise — methods of using microscopic analysis at "the chair" to assist in determining a diagnosis and degree of activity.

Point 1, Paragraph: 3 G.I.

If the Gingival Index is used in the field of Public Health to determine the presence and/or degree of periodontitis, then it is, in my opinion,

completely unacceptable for it is of value only in determining the degree of inflammation of the gingivae; there is no direct relationship between the presence or severity of periodontitis. In the most destructive cases of periodontitis, it is very unusual to have more than a slight oedema of the gingiva — rarely does one perceive much inflammation. It is this lack of an inflammatory barrier that appears to play a significant role in permitting the destruction process to proceed at a comparatively rapid rate; again it is accepted that with the development of the periodontal pocket in periodontitis, the orifice of the pocket may heal thus "sealing" in the bacteria in the deeper portions of the pocket which results in more rapid destruction occurring at the base: the G.I. would as a result be 0 or 0.5 — hardly an indicator of the degree or severity of periodontitis. To repeat, there is no direct relationship between the Gingival Index and the amount of attachment loss.

Point 4 — age

In my opinion, Dr. Stamm's comments regarding the age of the patients used in the experiment are of no consequence. It is accepted that periodontitis generally increases with age but what significance this has to the study I find difficult to comprehend. It has been reported that the incidence of periodontitis is increasing in younger age groups (e.g., under 35), but in my opinion this is due to a variety of factors: chiefly the increased awareness by the general practitioner, and the role of stress. At the other end of the scale, any periodontist who has been in practice a good many years will tell you that after a certain age (for each particular patient e.g., over 50, 60 or 70 as the case may be) many patients with past periodontal problems become and remain relatively healthy: active disease slows down and frequently becomes arrested. To repeat, I fail to see the logic in introducing the age factor to negate the results recorded.

Sir: Admitting that errors may be present in the article in question — as

there are in many publications, nevertheless I feel that Dr. Stamm could have used other, less distasteful means to express his displeasure. A young graduate student requires help and advice — not criticism in such a manner. In addition, the way in which he criticised The Journal, its Editor and Scientific Editor and the co-authors of the article in question shows very poor taste.

Robert F. Harvey, DDS,

FRCD(C), FACD, FICD

Associate Professor and Chairman

Department of Clinical Dentistry

Director, Division of Periodontology

Faculty of Dentistry

McGill University

I am writing you a reply to the letter of April 22nd to you from Dr. John Stamm of my Faculty of Dentistry at McGill University. He has given me a copy of his letter which has to do with his comments on our paper "Chondroitin sulfatase-producing and hyaluronidase-producing oral bacteria associated with periodontal disease" by Tam, *et al.* (J. Canad. Dent. Assn., no. 2, 1982).

Dr. Stamm assured me that he addressed you in such detail in the "interest of science"; it is in the same spirit that I am penning my reply. (Although this could have been done by him walking down the hall!) My reply to his points are as follows.

Point 1

Our paper did not have *etiological* bacteria as the main focus. No self-respecting microbiologist would do this without fulfilling Koch's postulates. We only reported the occurrence or incidence of certain enzyme-producing bacteria in periodontal pockets. The title of the paper only has the phrase "associated with" and not the "cause of" periodontal disease. No microbiological literature is extant at the present time to specify *etiological* microorganisms of periodontal disease.

The proverbial "chicken-or-the egg" question is raised when Dr. Stamm stated that "since the loss of periodontal attachment lags behind the

etiological cause, the decisive bacterial activity leading to the measured attachment loss is, to a certain degree, a passed event." The facts remain that such enzyme-producing bacteria are *present* and their capacity to degrade cementing substrates prevails. Further, the existence of patients with considerable past periodontal treatment and with the condition arrested were excluded from our choice of patients with active periodontal disease.

My clinical associate already has stated in a separate letter to you that gingival index is not a measure of the presence and/or degree of periodontitis. We stated in the paper that patients were classified according to clinical and radiographical examination and not to attachment loss alone. The fact that there is a "twilight" zone of periodontal attachment measurement of 3.0 — 3.5 mm in healthy and diseased patients should not be startling when considering the real clinical situation.

Point 2

The average percent active colonies was calculated in the manner we did because the *site* itself was not the important thing. The important thing was the *overall* (average) per cent of active colonies. It is also a fact that a count of fewer colonies is associated with greater technical error; this is a working principle of all bacterial plate counts.

Point 3

We do not believe that we violated any underlying assumption of correlation analysis: only two variables were studied and not three, namely, per cent enzyme-producers *and* loss of periodontal attachment in mm (*not* healthy and diseased subjects as stated). Our correctness may also find support in the understanding of the disease process itself. Periodontal disease is not like an acute infectious disease with life-threatening attributes. In other words, the distinction between "healthy" and "diseased" was viewed as a working classification. In fact, everyone over a certain age (say, 35) has periodontal disease in some form — mild symptoms to active se-

vere cases of periodontitis. Therefore, it seems logical to us to compare loss of attachment to incidence of bacteria from an understanding of the disease. Thus it does not and did not seem useful for us to demonstrate correlation by fragmenting our patients into healthy and diseased groupings. We have carried out these analyses but they serve no useful purpose.

As stated by Dr. Stamm, both variables (per cent chondroitin sulfatase producers and per cent hyaluronidase producers) are correlated with attachment loss.

The correlation we obtained, $r=0.52$, indicates a moderate to good relationship (p. 211, Statistics in Medicine by Colton; Little, Brown & Co., Boston.)

Point 4

We specified that patients were selected at random. No attempt was made to correlate age with loss of attachment although this would naturally occur recognizing the nature of periodontal disease. We saw no necessity to include age in the design of our experiments to deliver the thrust of the subject of our paper. Further elaboration on this point is in my clinical colleague's separate letter to you.

Point 5

We acknowledge the occurrence of several typographical errors but these do not alter any conclusions from the tables. These errors in the tables become obvious when the reader peruses the text.

For purposes of this particular project, the research design was purposely kept simple (e.g., without regard for age and sex of patients). Analysis of data was done to the extent thought sufficient to support our demonstration of a specific theme. Dr. Stamm's letter suggests that there is a variety of other statistical analyses that can be performed on the data. However, this approach is inconsistent with and deviates from a simple statistical analysis of laboratory observations made to illustrate a particular point, namely, the prevalence of certain enzyme-producing bacteria in periodontal pockets.

In our opinion, it is unfair to put any blame on the Journal's scientific review procedure. We found it meticulous (especially when it took so long in our particular case) and fair, especially with regard to the judgement of the scientific editor. To have expected a reviewer to exercise additional exhaustive statistical analysis would have been too much. Scientific standards can be maintained without rigorous adherence to non-essential and irrelevant procedures.

E.C.S. Chan
Associate Professor and Director
Division of
Microbiology, Faculty of Dentistry
McGill University

"Dental Milk"

This letter is in response to the article "Dental Milk" in the May 1982 issue by Phyllis Deakin. The article speculates whether the "Journal still represents the views of the majority of Canadian dentists" as a result of Waterloo continuing to add fluoride to the drinking water. I question the logic of this extrapolation.

The article also suggests adding fluoride to milk which would then be given to school children rather than fluoridating the water supply as the benefits of fluoride cease after age 14.

I would like to bring to the attention of Phyllis Deakin that fluoride may in fact be beneficial in preventing or alleviating bone diseases such as osteoporosis in the aging population by increasing bone density as well as preventing caries on exposed root surfaces in the aged.

I would suggest that the author research her material more carefully before being critical of the Journal by suggesting it is not open "to progress" and that she re-examine the benefits of fluoridation of the water supply.

Dr. Steven Malo
Simcoe, Ontario

Acknowledgement

It was remiss of me not to acknowledge Dr. R.I. Brooke, Professor and Chairman, Department of Oral Medicine, University of Western Ontario, in the publication of my article "Differential Diagnosis of Intraoral Ulcerative Lesions", (J.C.D.A., May, 1981). The classification of ulcerations I employed is by no means unique and has been proposed by a number of people. Dr. Brooke has advocated this categorization for years and it was he who first introduced it to me while I was an undergraduate at U.W.O.

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A 'milestone'

The paper on Selective Radiography in the April issue will probably turn out to be a milestone in the history of dentistry.

Dr. Kogon and Dr. Stephens have probably set in motion a determination among dentists to eliminate the routine X-ray screening of all patients. Unfortunately, a few still continue this unpalatable practice, often without first examining the patient.

"Informed consent of the patient" is an additional criterion to be considered.

Dr. D.C.T. Bullen
Comox, British Columbia

Journal ethics

I write to strongly question the propriety of the CDA Journal accepting the advertising from Myo-tronics Research Inc.

In their presentation on page 309 the impact was on the "economic significance, the insurance codes, court judgements" and "specific billing forms". Electronic removal of occlusal guesswork, and electronic solutions for a partial denture retention and orthodontic problems are almost guaranteed.

How can our Journal serve the purpose of ethical professional education and at the same time pander to a commercial approach such as this? And give continuing education credits as well? Does the Journal need the revenue to the extent that it will compromise its standards?

Sorry to come on *so strong*. The Journal represents Canadian Dentistry and I hope our standards are not officially eroded.

R.E. Echlin, DDS
Burlington, Ont.

CDA Retirement Savings Plan

Unit values of the Canadian Dental Association's Retirement Savings Plan stood as follows on June 30, 1982.

<i>Common Stock Fund</i>	\$43.9638
<i>Fixed Income Fund</i>	\$27.5030
<i>Guaranteed Fund</i>	\$23.6059
<i>Balanced Fund</i>	\$10.0088

Total assets (market value) of the plan were \$28,065,692.

The previous month's figures, as of May 31, 1982, stood as follows:

<i>Common Stock Fund</i>	\$48.2337
<i>Fixed Income Fund</i>	\$27.8573
<i>Guaranteed Fund</i>	\$23.3235
<i>Balanced Fund</i>	\$10.7315

Total assets (market value) of the plan were \$29,679,534.

For further information write to: Canadian Dental Service Plans Inc., Ste. 600, 2 Lansing Square, Wilmowdale, Ontario M2J 4Z3 or call the central information services of CDSPI At 1-800-268-5418 (497-7171 in Metro Toronto).

Pressions sur le gouvernement pour faire abolir l'impôt sur les primes dentaires

Avant-propos: *Lorsqu'on a annoncé aux Canadiens que, suivant les dispositions du budget fédéral du 12 novembre 1981, les primes des régimes d'assurance-maladie payés par les employeurs seraient imposables, le président de l'ADC, le Dr Donald E. Williams, a immédiatement écrit au ministre des Finances, M. Allan MacEachen, lui indiquant qu'il "est fort possible que cet impôt sera préjudiciable à la santé buccale des Canadiens qui voudront dorénavant renoncer à cette assurance-maladie..."*

"L'assurance dentaire," déclarait-il, "est rentable seulement lorsqu'on peut la vendre à des groupes nombreux. Si les primes en deviennent imposables, nous craignons que le nombre des assurés dentaires diminuera et que les primes augmenteront. Il s'ensuivra que le nombre des personnes ayant droit à des soins dentaires préventifs baissera et, en même temps, que sera détruite la pierre angulaire sur laquelle repose tout l'édifice de la dentisterie moderne."

De plus, a-t-il ajouté, "toute proposition visant à rendre moins disponibles les régimes d'assurance dentaire et à dissuader les gens de visiter le dentiste régulièrement, pourra avoir des conséquences désastreuses sur la santé des Canadiens."

Lettre du Dr D.E. Williams, Journal de l'ADC, vol. 48, no. 2, p. 76.

M. MacEachen a répondu au Dr Williams comme suit:

Merci pour votre lettre touchant la proposition du budget qui vise à inclure dans le revenu de l'employé, pour fins d'impôt, les avantages médicaux et dentaires que les employeurs accordent à leurs employés.

Dans le dernier budget (celui du 12 novembre), j'ai proposé que soient restreints ou supprimés certains adoucissements fiscaux, retenues d'impôt et privilèges qui, aupa-

ravant, étaient permis. Les recettes fiscales ainsi obtenues ont été utilisées pour abaisser les taux d'imposition généraux dans l'intérêt de tous les Canadiens. Quelque 12 millions de Canadiens tireront avantage du fait que les taux maximums d'imposition ainsi que les crédits d'impôts fédéraux et l'indexation sont changés.

Quand les employeurs acquittent les primes d'un régime d'assurance médicale ou dentaire, les employés protégés touchent des indemnités. Ce ne sont pas tous les Canadiens qui sont avantagés de la sorte. C'est pourquoi plusieurs d'entre eux, tels les travailleurs à leur compte qui ne sont pas protégés par une assurance médicale ou dentaire, ou tels les Canadiens retraités, ont à défrayer les coûts supplémentaires des soins médicaux et dentaires qu'ils reçoivent en puisant dans leur revenu qui est totalement imposable. Pendant plusieurs années, les cotisations que l'employeur versait pour les régimes d'assurance-maladie provinciaux ont été considérées comme un bénéfice imposable pour les employés. Vu ces conditions, je crois qu'il est juste que les bénéfices constitués par les régimes d'assurance médicale et dentaire défrayés par les employeurs soient imposables.

Je ferai remarquer cependant que, tout bien considéré, plusieurs Canadiens touchés par cette mesure seront avantagés à cause des réductions que le budget propose pour les taux d'impôt. La valeur de ces réductions, ainsi que la possibilité pour plusieurs contribuables mariés de réclamer un dégrèvement supplémentaire de 200\$ pour leur épouse à charge, fera souvent plus que compenser l'impôt additionnel sur les indemnités médicales et dentaires.

Le Dr. Williams a répondu à M. MacEachen dans les termes suivants:

Nous accusons réception de votre

lettre du 28 avril. Ce n'est pas sans appréhension que nous vous écrivons à nouveau, étant donné que votre lettre ne répond nullement aux questions que nous avons soulevées dans le mémoire que nous vous avons présenté le 21 janvier 1982.

Même les commentaires contenus dans votre lettre n'ont, pour la plupart, aucune valeur. De plus, comme supplément aux commentaires que nous avons formulés dans notre mémoire du 21 janvier 1982 et qui restent toujours sans réponses, nous désirons mettre en question quelques-unes des déclarations faites dans votre lettre.

Vous dites que la suppression de certains adoucissements fiscaux, retenues d'impôt et privilèges sera plus que compensée par les avantages qu'obtiendront les contribuables grâce aux rajustements des taux d'impôt et du crédit d'impôt fédéral. La plupart des gens que l'impôt sur les primes des régimes d'assurance dentaire désavantagera, ont des revenus dont les paliers d'imposition sont inférieurs ou moyens. Les taux d'impôt pour ces paliers de revenu n'ont pas été abaissés. L'optique suivant laquelle l'indexage des paliers d'imposition constitue en dégrèvement fiscal, vaut seulement si l'on assume que l'approche "normale" ou "adéquate" est de permettre que l'impôt augmente simplement parce que les gens veulent maintenir le pas avec le taux d'inflation. En outre, les avantages de la réduction des taux d'imposition et de l'indexage sont beaucoup plus importants pour ceux dont les revenus annuels sont de plus de cinquante mille dollars (50 000\$).

Il est faux de dire que les rajustements du crédit d'impôt fédéral dédommageront les gens dont les impôts seront augmentés parce que les avantages des régimes d'assurance dentaire seront imposables.

Pressions (continué)

Au contraire, dans la plupart des cas, c'est un fait que les rajustements du crédit d'impôt fédéral désavantageront les contribuables. Pour divers groupes, les conséquences de ces rajustements seront comme suit:

1. Pour les familles avec deux revenus dans lesquelles les deux conjoints gagnent plus de vingt-sept mille quatre cent huit dollars (27 408\$) de revenu imposable, le crédit d'impôt fédéral proposé sera de quatre cents dollars (400\$) alors qu'auparavant il aurait été de mille dollars (1 000\$).
2. Pour les familles avec deux revenus dans lesquelles les deux conjoints gagnent entre seize mille huit cent quatre-vingt-dix dollars (16 890\$) et vingt-sept mille quatre cent huit dollars (27 408\$), chacun perd une somme égale à neuf pour cent de l'impôt fédéral sur son revenu, soit de quelques dollars seulement à six cents dollars (600\$) pour les deux conjoints.
3. Les contribuables célibataires qui ont des revenus imposables de seize mille huit cent quatre-vingt-dix dollars (16 890\$) à vingt sept mille quatre cent huit dollars (27 408\$) profiteront d'un rajustement du crédit d'impôt fédéral allant jusqu'à trois cents dollars (300\$).
4. Le contribuable avec un revenu moyen dont le conjoint ne gagne rien sera peut-être dans une meilleure situation ou ne sera que peu désavantagé. S'il a un revenu imposable de vingt-deux mille sept cent soixante-dix-huit dollars (22 778\$), il pourra profiter du crédit d'impôt maximum de quatre cents dollars (400\$) que la nouvelle formule propose. Tout contribuable marié dont le conjoint ne gagne rien et qui a un revenu inférieur à cette somme sera quelque peu avantagé. Lorsque le revenu imposable est supérieur à cette somme, le contribuable pourra perdre

jusqu'à cent dollars (100\$) si son revenu atteint 27 408\$.

Ainsi, ce sont les familles dans lesquelles il y a deux travailleurs et qu'on trouve le plus communément dans les groupes à revenus moyens ou inférieurs qui seront le plus touchés. Incidemment, ces groupes sont également ceux qui ne tireront aucun avantage des rajustements de taux.

Bien que vous fassiez remarquer que ce ne sont pas tous les Canadiens qui bénéficient d'un régime d'assurance médicale ou dentaire défrayé par l'employeur, il y a un nombre important de contribuables qui touchent des indemnités en vertu de ces régimes et que les nouvelles mesures désavantageront. À part les exemptions personnelles, il n'y a aucune disposition dans la Loi de l'impôt sur le revenu qui concerne tous les contribuables. À notre avis, la disposition touchant les régimes d'assurance médicale et dentaire concerne autant de contribuables que ne le fait pratiquement aucune autre disposition de cette loi. Si, dans les provinces, les primes des régimes d'assurance-maladie défrayées par les employeurs sont imposables, c'est parce qu'une part très considérable du coût de ces assurances n'est pas couverte par les primes mais par les recettes fiscales en général. Dans le cas des régimes d'assurance médicale et dentaire privés, leur coût total est défrayé grâce aux primes.

Nous désirons également faire remarquer que l'une des conséquences qu'entraînera véritablement l'augmentation des impôts, sera sans doute l'annulement de ces régimes privés par plusieurs employeurs. Aussi les employés qui, auparavant, n'étaient pas protégés par un régime d'assurance dentaire ne tireront-ils aucun avantage des rajustements proposés. Par contre, la qualité des soins dentaires dont bénéficient les employés en vertu des actuels régimes d'assu-

rance dentaire privés, diminuera de façon marquée et, à long terme, il en coûtera davantage, socialement et financièrement, aux régimes médicaux du Canada.

Nous remarquons qu'un nombre de changements proposés le 20 novembre dernier ont déjà été appuyés par le Ministère des Finances. Nous souhaitons que les raisons présentées dans notre mémoire du 21 janvier 1982 et dans la présente vous contraindront à réviser complètement les propositions touchant les régimes d'assurance dentaire qui concernent un grand nombre de contribuables et d'électeurs.

*Le président de
l'Association dentaire canadienne,
le Dr D.E. Williams*

Conclusion: *Lors du Congrès de l'ADC et de l'ADO à Toronto, en mai dernier, le Dr Williams a déclaré que l'ADC a fait et continue à faire "de fortes pressions pour que soit aboli l'impôt sur les primes des régimes d'assurance dentaire. Nous ne voulons pas que ces pressions diminuent."*

Depuis ce temps, et compte tenu du fait que le budget présenté le 28 juin ne change en rien les intentions du gouvernement, le Dr Williams a réitéré son appel aux membres "afin qu'ils écrivent au ministre des Finances... pour protester contre cet impôt... Si vous lui avez déjà écrit, je vous en remercie et vous demande de lui écrire à nouveau. Nous devons continuer à faire pression sur le gouvernement afin qu'on sache bien que cette question nous préoccupe vraiment et que nous agissons au nom de tous les Canadiens."

Une copie des lettres reproduites ci-dessus et une seconde lettre de refus, composée après avoir vu le conseiller fiscal de l'ADC, ont été envoyées à chacun des membres du Parlement, afin que le Chambre des Communes connaisse la position de l'ADC.



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Two distinguished Maritime dentists receive honorary degrees from Dalhousie University

A special convocation in which two distinguished Maritime dentists were awarded degrees of Doctor of Laws, honoris causa, was the colorful and impressive highlight of the XII Biennial Conference on Canadian Dental Research and Education at Dalhousie University in Halifax, on June 18.

Canadian Dental Association President, Dr. Donald E. Williams of Moncton, N.B., a graduate of Dalhousie Dental School in 1955, was admitted to the honorary degree by the President and Vice-Chancellor of Dalhousie, Dr. W. Andrew MacKay, who commented, "I don't recall that we've had such a collection of dentists in Halifax before."

Dr. Hazlett Saunders Crosby, who has had a long and distinguished career as a dentist, teacher and soldier, and still serves as a professor emeritus at his alma mater, was also honored with a Doctor of Laws degree.

Dean Ian C. Bennett of the Dalhousie Faculty of Dentistry said the honor to Dr. Williams was "belated. There has been a long and rewarding association between Dalhousie and the CDA and we hope that it will continue."

Building officially opened

The new \$21 million facilities of the Dalhousie Faculty of Dentistry were declared officially opened on the same occasion, by Senator Henry Hicks, representing Health and Welfare Canada Minister Monique Bégin and Secretary of State Gerald Regan, Nova Scotia Education Minister Terry Donahoe, representing N.S. Premier Buchanan, and A. Gordon Archibald, chairman of Dalhousie's Board of Governors.

The five level building, an ingenious marriage of new construction and renovation of a previous structure, was funded entirely by the fed-



CDA President Dr. Donald E. Williams, left, is installed as an honorary Doctor of Laws by Dalhousie University President and Vice-Chancellor, Dr. W. Andrew MacKay. (Inset) Dr. Hazlett Saunders Crosby, Professor Emeritus at Dalhousie, is seen after receiving his honorary degree.

eral government, and the provinces of Nova Scotia, New Brunswick and Prince Edward Island. It has the capacity to train a potential 64 students in both hygiene and dentistry.

"Dental education is alive and well and living at Dalhousie," said Dr. Ralph Y. Barolet, retiring President of the Association of Canadian Faculties of Dentistry, who brought greetings from his organization at the convocation. "It is a memorable day for Canada and will enable Dalhousie to face the 21st century with new confidence."

N.S. Education Minister Donahoe noted that Dalhousie had achieved a "widely recognized standard of excellence in training" in its 75 year history of dental education and that the new facilities would ensure that standard will continue.

Following the Convocation, the academic procession moved out of the Rebecca Cohn Auditorium and walked the three blocks to the new dental building, where the plaque, officially unveiled during the Convocation, was affixed to the dental building wall.

ODQ may test legality of Québec's transfer of dental duties to hygienists and assistants

L'Ordre des dentistes du Québec is determining if legal action can be taken against the Government of Québec, particularly on the grounds that the new regulations which transfer traditional dental treatment roles to hygienists and dental assistants, may be "dangerous to the public."

The ODQ may also challenge the Government's contention that it has control over all professional groups in the province, ODQ President Dr. Jean-Guy Landry told the CDA Journal. Traditionally, professionals have had jurisdiction within their own profession. The ODQ is presently making contact with other leading professional bodies in Québec with a view to sending a collective delegation to Québec City.

The storm arose when the Levesque Government announced cutbacks in the province's health care services, intended to realize a \$45.7 million annual saving.

In the dental area of the cutbacks, proclaimed in the Québec Gazette on June 2, the new regulations reduce services in the free dental health program for children 15 and under, and the government hopes to save \$25 — \$28 million a year as a result.

Prior to the introduction of the new program, Premier René Levesque said that the former program has been moving toward a total cost of "close to \$100 million a year, which we think is excessive compared to the benefits."

The real storm arose when Premier Levesque commented "this will mean that dental hygienists will have responsibilities from now on for quite a few of the traditional dental care acts."

Sixteen "new services"

The new program has delegated 16 "new services" to hygienists and assistants. They include: taking dental radiographs, pulp vitality testing, taking impressions for study models, inserting, carving and finishing sil-

icate, acrylic, composite, amalgam and base cement, cementing crowns and temporary bridges, removing stitches in periodontics, choosing, placing and removing orthodontic bands, placing and removing periodontal packs and recementing temporary space maintainers. Those duties will now be performed on site, under supervision.

However, seven other duties may be performed with "remote" supervision. These include: polishing fillings without drilling, scaling of teeth and root planing, performing preventive teeth prophylaxes, topical application of fluorides or desensitized solution, pit and fissure sealings, preventive varnish application, and placing and removing of dressings when the pulp is not exposed, without drilling.

The new measures "contradict the general opinion of the profession and endanger the dental care delivery system, accessibility to, and quality of, dental care services," Dr. Landry recently told members of the ODQ.

He termed the legislation "a regrettable bid for power by the government over dentists and professions in general."

"Irreversible damage"

Dr. Pierre-Yves Lamarche, director-general of the ODQ, said that the PQ government's decision to grant more responsibility to hygienists may expose patients to "irreversible damage," because, he said, the CEGEP-trained (community college-trained) assistants will be doing the work of university-trained dentists.

The new regulations allow hygienists who have completed a three-year community college course, to perform the 16 new dental services.

Hygienists will continue to teach dental hygiene and assist in determining the causes of tooth decay, under the direction of a dentist.

Dr. Lamarche said the ODQ, the

licensing body for the 2,577 dentists in the Province of Québec, has long recognized the need to expand the duties of the province's dental hygienists.

He is opposed, however, to the new arrangement which he says will allow the hygienist to diagnose gum problems and cavities, without first having consulted a dentist.

The regulations, he said, mean that "the hygienist doesn't have to check with the dentist, and the dentist cannot insist on observing what the hygienist does. It's just too dangerous!"

Not taught these duties

Dr. Landry said he objects to the new policy because he claims the hygienists are not taught to be competent in diagnosing decay and gum problems.

Hygienists, he said, will now be allowed to conduct these services under "distant supervision" which, "for all practical purposes, entrusts supervised hygienists with the task of deciding whether they should consult or not consult, their supervisor." Also, he added, "it is well known that consultation in no way binds the consulting person. In fact, this distant supervision is a mean con, as it gives hygienists almost complete autonomy."

Dr. Landry is also annoyed that, "despite the opposition of a great majority of professionals, and beyond any expectations, the minister allows dental hygienists to perform tooth-filling procedures.

"Quality of, and access to dental care, were completely ignored by the minister," he said.

Dr. Landry has called on members of l'Ordre des dentistes du Québec to "react most vigorously with whatever means available." He urged members to continue to support "delegation procedures" to "best ensure public protection and high quality care, and in due respect of the (dental) profession."

(Continued on page 495)

Fluoridation issue becomes 'more political' than scientific in public debates on issue

Fluoridation officials may have lost many a community vote by believing fluoridation to be a scientific issue. Now it is obvious that the issue is "more political than scientific."

Even though fluoridationists know it is effective and safe and that fluorides can reduce tooth decay by up to two-thirds, it is difficult to communicate this to the general public.

Speaking on the subject "Strategies for Implementation of Fluorides", Dr. Patrick Blahut, Assistant Professor and Head of the Division of Community Dentistry at Dalhousie University, Halifax, said that fluoridation officials and anti-fluoridationists have been "poles apart" in their points of view in the past, and when the matter was put to a vote "usually the antis won."

Dr. Blahut told his audience at the XII Biennial Conference on Canadian Dental Research and Education in Halifax on June 19 that because of the wide variation in the nature of information they get from both sides, the people "get very cautious and confused about the issue."

The private dental practitioner can play a major role. "Try to educate people you see in your practice, day by day, and particularly people who are prime leaders in your community," Prof. Blahut said.

"You move the movers," before

there is any controversy, he said. "Give them a pep talk and some literature. Get them on your side." Then, when controversy does arise, "contact them again as interested people. They could become the 'pro' leaders and would likely be happy to get involved in the community."

The best way to handle the matter prior to a vote, he said, is to maintain maximum visibility immediately before the referendum. Keep campaign messages short and simple (don't overwhelm with scientific messages), avoid public debates, keep a positive, not reactionary image, emphasize endorsements by prominent "locals" (local leaders and dentists are much more effective than "outsiders") and "remember: the issue is political, not scientific."

Why opposition?

People become opposed to the subject of fluoridation chiefly because of a lack of knowledge about the purpose of the measure, he said. But they may also be opposed because they have an anti-science attitude; they are environmentalists who believe this is "tampering with Nature," because they are relatively less educated, anti-authority, perceive themselves as disadvantaged, consider it another form of government intervention, or are generally "alienated."

The ridiculousness of some opposition was illustrated in Cleveland, Ohio, when it was planned to treat the water with fluorides, but it didn't happen. On the date the introduction of fluoridation was scheduled, there were countless telephone calls that cats refused to drink the water, house plants were dying, and a great variety of other dire symptoms. People were demanding that the fluorides be "taken out," Prof. Blahut told delegates.

He pointed out that before the 1950's there was very little political controversy, but when it began, the anti-groups "began to use, and still do, every trick in the book."

Their most common arguments in a public debate are that fluoridation is not effective, it's unsafe, or is mass-medication, and is therefore "against our civil liberties."

Common charges today, he said, are that it causes such health problems as arthritis or cancer. "As soon as the key word is out, for example 'cancer', you can't win."

Because of the conflicting information voters get prior to a referendum, the results may often be very surprisingly anti, he said. They may be suspicious of the scientific explanations, and begin to believe lay charges and "outlandish statements" in newspapers. "Because it's in print, they believe it is true," he said.

He warned pro-fluoridationists, who "tend to have one set message," that every community presents a different set of circumstances.

There is one thing that is good about being faced with the arguments of the antis, he said. "We are forced to do something. We have to go back and learn the issues involved. We can't just say that fluorides are effective and safe. They are many good references, numerous good books on the subject."

ODQ may test (continued)

Massive response

The ODQ has sent to all of its members a copy of the new government legislation and a following letter stating the official position of the ODQ in the matter of delegation of dental acts to hygienists. The ODQ asked members to sign a personal commitment statement, indicating support.

Within three weeks, about 1,580 members had responded and returned signed commitment forms.

A second mailing was proposed by ODQ, with the objective of "reaching at least 2,000 of our members," Dr. Landry said.

Official letters have been sent to the provincial government and Prime Minister Pierre Trudeau, Dr. Landry said, in describing ODQ reactions until early in July.

Prime Minister Trudeau responded, and also sent a letter to Québec City, suggesting action on the matter.

Continuing Dental Education

Sponsoring Institution/Address	Location of Course	Title of Course	Subject Area	Date	Style	Instructor(s)	Registration	Fee	Audience	Contact Person/Telephone
University of Toronto	Sheraton Centre, Toronto, Ont.	The Functional Appliance in Orthodontics	Orthodontics	Oct. 16-17, 1982	Patients and Technical Sessions are offered	Dr. Donald G. Woodside and Staff, Department of Orthodontics				Mrs. Jennifer White (416) 978-2358
University of Western Ontario	London, Ont.	Practice Administration in the 80s	Practice Management	Sept. 24-25, 1982 (Course to be repeated June 10-11, 1983)	Lecture	Dr. R.A. Brandon	open	\$200	General practitioners, specialists, assistants, hygienists, other.	Mrs. M.J. Wiersma (519) 679-2862
"	"	Common Oral Diseases: a Refresher Course for the General Practitioner	Oral Pathology	Oct. 22-23, 1982	Lecture/Demonstration	Dr. D.G. Gardner	open	\$150	General practitioners, lab technicians	"
"	"	Occlusion I: Fundamentals of Occlusion and Articulation	Prosthodontics (fixed)	Nov. 4-6, 1982	Lecture/Demonstration/Participation	Drs. W.R. Teteruck & Dr. Gratton	Limited to 16 applicants	\$750	General practitioners, lab technicians	"
"	"	Periodontics, Oral Diagnosis and Oral Medicine applied to General Practice	Periodontics	Nov. 4-8, 1982	"	Dr. D.S. Moore	Limited to 9 applicants	\$400	General practitioners, assistants	"
"	"	Basic Cardiac Life Support (CPR), Review of Emergency Drugs		Nov. 6, 1982 (Course to be repeated April 9, 1982)	"	Drs. I.D.F. Schofield & A.G. Parnell	Limited to 20 applicants	\$100	General practitioners	"
"	"	Crown and Bridge in the 80s	Prosthodontics (fixed)	Dec. 2-4, 1982	"	Drs. D.R. Gratton & W.R. Teteruck	Limited to 10 applicants	\$400	"	"
University of British Columbia	Vancouver, B.C.	Balancing Body Chemistry	Other	Sept. 11, 1982	Lecture	Dr. Hal A. Huggins	open	\$75 (dentists), \$35 (auxiliaries)	General practitioners, specialists, assistants, hygienists	Dr. Malcolm F. Williamson (604) 228-2627
"	"	Four-Handed Dentistry in Clinical Practice	Auxiliary Utilization	Sept. 25, 1982	"	Dr. Joseph E. Chasteen	Limited to 26 registrants	"	"	"
"	"	Dental Management of the Medically Compromised Patient	Other	Oct. 2, 1982	"	Dr. Bruce Blasberg	open	"	"	"
"	"	Restoration and Utilization of Endodontically Treated Teeth	Endodontics	Oct. 9, 1982	"	Dr. Hans Krurer	"	\$75 (dentists), \$75 (auxiliaries)	"	"

Sponsoring Institution/Address	Location of Course	Title of Course	Subject Area	Date	Style	Instructor(s)	Registration	Fee	Audience	Contact Person/Telephone
"	"	Stress and Wellness: Management of Self-Health for Effective Living	Practice Management	Oct. 9 & 16, 1982	"	Dr. M.L. Christianson & Ms. Bev Abbey	Limited	TBA	General practitioners, specialists	"
"	"	An Update on Pedodontics for the General Practitioner	Pedodontics	Oct. 23, 1982	"	Dr. Gary Derkson & Dr. Gordon Jinks	open	\$75 (dentists), \$35 (auxiliaries)	General practitioners, specialists, assistants, hygienists	"
"	"	Achieving Excellence in Cast Restoration	Prosthodontics (Fixed (Removable))	Oct. 30, 1982	"	Dr. Robert E. Fadal	"	TBA	"	"
"	"	New Concepts in Esthetic Anterior Restorations	"	Nov. 6, 1982	"	Dr. Herbert Ward	"	\$75 (dentists), \$35 (auxiliaries)	"	"
"	"	Recent Advances in Pain Control Techniques	Pain Management	Nov. 13, 1982	Lecture, Demonstration	Dr. David Donaldson & Dr. Theodore Jastak	"	"	"	"
"	"	Planning the Precision Restoration	Prosthodontics (Fixed Removable)	Nov. 20, 1982	Lecture	Dr. Harry Gelfant	"	"	"	"
"	"	Clinical Oral Pathology	Oral Pathology	Nov. 27, 1982	"	Dr. Robert W. Priddy	"	"	"	"
"	"	Beyond Motivation: Programming You and Your Patients for Success	Practice Management	Dec. 4, 1982	"	Mr. Tracy Getz & Dr. Philip Weinstein	"	"	"	"
Bytown Dental Study Club	Top of the Hill, Skyline Hotel, Ottawa, Ont.	A Clinician Workshop-Continuing Education Programs: Preparation and Presentation		Sept. 23-25, 1982	Lecture	Dr. Robert H. Rasmussen, Ed. D.	Limited to 30 applicants	\$225		Dr. John F. Miner (613) 235-8544
"	"	Occlusion in Everyday Dentistry (emphasizes Appliance Therapy for TMJ and related problems)	Occlusion	March 4, 1983	"	Dr. Clifford Fox	open	\$115		"

WARNING!

ALL APEX LOCATORS ARE NOT NEOSONOS X-RAYS ARE WRONG—NEOSONO IS RIGHT

The principle behind all electronic apex locators is the same. This principle, published by Sunada in 1962, showed that the electrical resistance of the periodontal ligament has a constant value. Electronic apex locators attempt to measure electrical resistance in a root canal and compare the resistance to a reference value. However, there are hundreds of possible circuits that can attempt to measure the small changes in resistance over a distance of one-tenth of a millimeter. Only the Neosono line circuitry has been clinically tested over an 11 year period. In these studies the canals were often measured both by x-ray and with our apex locator. The teeth were then extracted with the reamer in place. The accuracy was found to approach 100% in the studies. In one such study published in the Journal of Endodontics¹ the device was 100% accurate, while x-rays were wrong 37% of the time in the same canals. Other apex locators use simplified, less sophisticated, circuitry which may be capable of providing resistance measurements to estimate the length in certain cases, such as when the canal is completely cleaned and dried. Compare this limitation to the Neosono circuitry which was shown in a clinical study published in "Triple O"² to produce 100% accuracy without prior removal of the pulp or drying the canal. Imitation units have been unable to produce any comparable clinical studies. The Neosono circuitry is sophisticated enough to screen out the complex electrical signals present if pulp or debris is present.

What are some of the unique features of the Neosono, developed over the last 12 years, that imitators don't provide?

	Neosono	Imitators
1. Published clinical studies (11) proving accuracy.	Yes	No
2. Published studies showing accuracy with pulp present.	Yes	No
3. Provide the distance, in tenths of a millimeter, from apical foramen.	Yes	No
4. Ability to set circuit to stop at preset distance (e.g. 1/2mm short), not just a range of 1 mm.	Yes	No
5. Ability to get exact length without looking at device via audible signal (visual reading also available).	Yes	No
6. Different audible and visual signal if reamer passes apex. Avoids overinstrumentation.	Yes	No
* 7. Ability to obtain length with <u>nothing attached</u> to reamer.	Yes	No
8. Avoid calibrating unit each time device is used.	Yes	No
9. Ability to compensate for variations in patient resistance.	Yes	No
10. Does not require large, cumbersome lip attachment (miniaturized ground).	Yes	No
11. Does not require electrical isolation of patient from chair, etc.	Yes	No
12. Made and serviced in U.S.A. by manufacturer.	Yes	No
**13. Models with all 12 unique features above starting at \$379.	Yes	No



Plus—The NEOSONO-D with

14. Ability to read the distance from apical foramen directly on a screen in millimeters (to 1/10th mm).	Yes	No
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¹Journal of Endo., Vol. 2, No. 7, July 1976, p. 215.

²Oral Surgery, Oral Medicine, Oral Pathology, Vol. 38, No. 3, Sept. 1974, pp. 469-473

Also see "joltless" pulp tester, Madajet, and new Adalite fiberoptics to attach to your handpiece at the California Dental Meeting, Booths 354, 985 and 1074, and at every national, state, local and Canadian convention. See programs for booth numbers.

MENTION THIS AD AND RECEIVE A SPECIAL DISCOUNT

Newfoundland dental plan cuts annoy Dental Association members

Newfoundland's Government has reduced services offered under that Province's children's Dental Health Plan, in a recent budget-cutting exercise.

Dentists are concerned about the effects on children's dental health, but very annoyed because of the manner in which the revised program was implemented.

According to Newfoundland Dental Association's Executive Secretary, Dr. Toby Gushue, there was no prior consultation between the government and the NDA executive, nor any of its members. Dr. Gushue said they first learned about it in the morning newspapers.

At the semi-annual meeting of the NDA, soon after the announcement, two motions were passed, one recommending that the ministers of health and finance be contacted to consult with them about the loss of services in the Children's Dental Health Plan, and the second stating that "... we are shocked that the basis of this program has been negated by the recent budgetary curtailment of this necessary preventive procedure. We request the rescinding of this most regressive step."

The NDA has followed this action by proposals offering to subsidize a major portion of the service if the Government would reinstate it. "We even offered to reduce our fees, which would save them \$400,000," Dr. Gushue said. "But they refused it."

Health Minister Wallace House has estimated the cuts would save up to \$600,000 annually.

The reduction involves basically the number of children's examinations and fluoride treatments permitted (cut from two to one per year).

Dr. Gushue said the matter of no consultation before the announcement is very uncharacteristic of the Newfoundland Legislature. "They

have always contacted us before," he said.

"It is a political hot potato in Newfoundland" at the moment, he said, and there has been "an open debate through the news media." Unfortunately, he said, some of the messages have been misinterpreted in the process.

The NDA, at that point, was seeking more meetings with the health and finance ministers.

However, Dr. Gushue concluded, "there seems to be some light at the end of the tunnel." The government has given some indication it is considering restoration of at least part of the service.

Brig.-Gen. James N. Wright named Director General of Dental Services

Brig.-Gen. James N. Wright assumed the position of Director General of Dental Services for the Canadian Forces, succeeding Brig.-Gen. William Thompson, CDA's president-elect, on June 25, 1982.

Born in Lethbridge, Alberta, he brings to the position an extensive and diverse academic, professional and military background. General Wright began his military career when he enrolled in the regular officer training program at the University of Alberta. He went into full-time military service when he obtained his DDS in 1956. A certified specialist in periodontics, he has a MSc degree in oral pathology and is a graduate of the National Defence College.

General Wright has served with the United Nations as Senior Dental Advisor to the United Nations Emergency Force in Egypt, and as special projects officer in the dental division and as director of dental treatment services at National Defence headquarters.

He has been active in civilian dental organizations, including his involvement as a member of the House of Delegates of the Association of Canadian Faculties of Dentistry, representative to the CDA's Council on Education, the Provincial Dental Secretaries Conference and the newly



Brig.-Gen. James N. Wright

formed Conference of Provincial Licencing Bodies, member of the CDA Council on Education accreditation survey team for post-graduate studies, and the CDA Board of Governors.

A Fellowship in the International College of Dentists was conferred on General Wright in 1977 in recognition of his contributions to dentistry. In 1980, he was appointed Honorary Dental Surgeon to Queen Elizabeth II.

He makes his home in Ottawa with his wife, Elaine, and their three daughters.

New Saskatchewan health minister pledges consultation with dental colleges

"I can assure you that I intend to become fully acquainted with dental health issues," Saskatchewan's new Health Minister, Graham Taylor, told delegates to the College of Dental Surgeons of Saskatchewan, annual convention in Saskatoon.

His presence and interest were warmly received by the delegates, because this was one of the first public speaking invitations he has received and honored, since his appointment to the portfolio.

Mr. Taylor said he was aware that "in the past the Government of Saskatchewan has not always chosen to consult fully with the College of Dental Surgeons or the College of Dentistry before deciding to implement dental programs in the province." He promised delegates "that I intend to actively seek your advice and input before implementing any new programs."

Saskatchewan's new premier, Grant Devine, has indicated his government wants to make that province's health care program "Number one in Canada," Mr. Taylor said. "I certainly intend to shoot for that goal and dental services are a vital part of comprehensive health care and will get due consideration."

Adolescent program

Mr. Taylor told delegates that he knows about "the willingness of members to participate in the adolescent dental program to provide care to young people born in 1966 and 1967, and your willingness to work with a modified capitation payment mechanism." He said he was also aware that "members are able and prepared to assume the responsibility of providing care to more of these young people."

Manpower

The minister noted with satisfac-



Saskatchewan's new Health Minister, Graham Taylor, addresses the College of Dental Surgeons of Saskatchewan at its annual meeting in Saskatoon. CDA President Dr. Donald E. Williams is seated left.

tion that the distribution of dentists in Saskatchewan "is greatly improved from the early 1970's. However, he said that he wants the College of Dental Surgeons and the Department of Health to monitor the situation "very closely."

He said he was aware of the over-

supply of dentists and auxiliaries in some parts of Canada, and that there is "some concern that a similar situation could be developing in Saskatchewan." He noted that the dentist-to-population ratio in Saskatchewan is now "approximately one dentist to every 2,800 people."

Les Journées Dentaires du Québec attracts record attendance

A record high attendance of 4,702 people from Canada, United States and several francophone countries made Les Journées Dentaires du Québec 1982 one of the most successful yet.

Of the 4,702 people who attended the convention in Montreal May 23-24, 1,772 were dentists among whom were 49 from francophone countries including 13 deans from the 16 dental schools in France. Several other representatives from the French-speaking countries of Gadeloupe and Lebanon attended.

There was a substantial participation by Canadian dentists, and the

United States was represented by nearly 100 dentists.

Major attractions in the diversified scientific program were the two-day pre-convention course on office management by Drs. Richard Klein and Ralph O'Connor, and a presentation by Covert Bailey on nutrition and health. Also, the meetings of l'Association Internationale Francophone de recherches Odontologique and the International Analgesia Society with Les Journées Dentaires du Québec attracted a widespread attendance and further contributed to the international character and status of this annual continuing education event, sponsored by l'Ordre des Dentistes du Québec.



At CDA Council on Education meeting

The Council on Education of the Canadian Dental Association met at CDA headquarters May 17-19. This meeting marked the last time Dr. D.J. Yeo would appear as chairman of this council. Front row, left to right, are: Dr. M. Santangelo; Ms. Rita Hurley, Mrs. Thora Appelt, secretary; Ms. Marlene Paquin; Ms. Marg Miller; and Dr. D.J. Yeo, chairman. Second row: Drs. D.L. Thompson; N.H. Andrews; G.W. Meyers; K.C. Bentley and Ian C. Bennett. Back row are: Drs. M. Jahjah; E.J. Rajczak; J.V.P. Chatwin, director of accreditation, George H. Peacock; and N.H. Layton.

CP Air extends a warm welcome to the Canadian delegates attending the 3rd International Dental Congress on Modern Pain Control

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The Real World of Claims — CDSPI

This article is intended to be the first in a series from CDSPI, entitled "The Real World of Claims". The purpose is to provide information about actual claims submitted to our insurers. These human interest stories will give everyone some insight that will be more useful by presenting circumstances to which you, as a dentist, can relate.

THE REAL WORLD OF CLAIMS, Case #1

This Long Term Disability claim was incurred February 8, 1980 as the result of an accident. The dentist was struck by a passing vehicle while doing roadside repairs to his own vehicle.

In addition to cuts and bruises, the tire iron was imbedded in the dentist's right hand, causing serious damage to the nerves. Surgery repaired the damage to the nerves; then the recovery period commenced.

A claim was filed for Long Term Disability benefits of \$1,400 per month plus Office Overhead Expense benefits of \$4,400 per month. The first claim payments were issued promptly with assurance to the insured that everything possible would be done to assist him.

The documentation on the case revealed that it would be beneficial to give this claim additional personal attention. The insurance company arranged to have an independent trained counsellor visit the dentist.

Our claimant, in a letter, said that he was "astonished" to see the personal touch being accorded his problem. He also stated that "it was refreshing to discover a face behind the computer print-out. I cannot praise enough the potential benefits to someone like myself of meeting a person willing to listen and appraise the circumstances I face. Our profession should be informed of the aid and

service that is given to a disabled dentist."

In this particular claim situation, the return to work by the dentist on a reduced time and effective performance level has resulted in a very slow recovery as far as income is concerned. In fact, the most recent claim cheque was based on a 86 per cent loss of income. From all indications, partial disability benefits will be in effect for quite some time.

The claimant says "although the residual damage to my hand is minimal as related to day-to-day activities, it still has had a particularly adverse effect on my productivity as a

dentist.

"Consider, say, a mere decrease in gross earnings of approximately 20 per cent. Since office overhead remains relatively constant, the result is a reduction in my *net* income of approximately 60 to 70 per cent. It is in this area that the partial disability clause is so helpful — that it is calculated on the net income, not the gross income."

Often, the Real World of Claims is quite different than any assumed "what if" situations. Watch for further articles on the Real World of Claims in future issues of the CDA Journal.

CDA media workshop in Manitoba is termed 'very successful'

A Manitoba Media Workshop was held in Winnipeg the weekend of June 12-13 and termed "very successful" by workshop leader Paul McLaughlin. Some of the members of the Manitoba Dental Association who participated are shown in these photos.



Above, Dr. Gene D. Solmundson, President of the Manitoba Dental Association, left, is interviewed by Paul McLaughlin. David Welch, technician, is in the foreground. Below, left to right, are: Dr. Robert Baker, Past-President of the MDA; Ross McIntyre, Secretary-Treasurer of the MDA; Patricia Locke, interviewer; Paul McLaughlin, and Dr. Eugene Shaharin, an MDA board member.



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N-CDAJ

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NDHM Poster Contest Winners announced

The ladies swept the field this year in the 1982 National Dental Health Month poster contest. Girls won in all three categories. The judging was held at CDA headquarters in Ottawa June 21, 1982.

The only entry from a kindergarten, Kari Dietrich of Qualicum Beach Elementary in Qualicum Beach, B.C. took the prize in the kindergarten to grade one category. Kari's poster featured a bright green bunny with a toothbrush who wished all "Hoppy Brushing".

The winner in the grade two to four category was another B.C. girl, Louise Zwozdeski from Elko Lake, B.C. Louise is in grade four and attends Baynes Lake Elementary School. Her entry depicted all the various races of Canada smiling widely, with the NDHM slogan "Smile Canada" in a banner across the top.

The grade five to seven category was taken by Michelle Cameron, a grade six student at New Victoria Elementary in New Victoria, Nova Scotia. Michelle's winner featured a cartoon illustration of plaque being kept away from a tooth by the Smile Canada maple leaf.



The three judges of the 1982 NDHM Poster Contest look over the winning posters. Judges from left to right are: Hubert Drouin, Executive Director, CDA, Dr. Michel Carvonis, National Dental Health Month Chairman, and Jim McPherson, owner of Den-Art Gallery in Ottawa.

This year's contest judges were: Jim McPherson, owner of Den-Art Gallery in Ottawa, Dr. Michel Carvonis, National Dental Health Month Chairman, and Hubert Drouin, Exec-

utive Director of CDA.

The winners will receive prizes from CDA's national headquarters in Ottawa.

Ontario begins health structure overhaul

Preventive dentistry is one of a set of seven standard services that will be created in a new public health act introduced in the Ontario Legislature by Health Minister Larry Grossman, on June 8.

Prevention will be "a key strategy on both medical and financial grounds," in the new document, Mr. Grossman said.

"Our goal is to emphasize preventive medicine through campaigns which stress prevention through immunization, home care and other

community-based programs." Local public health units will be responsible for implementing "a basic core of preventive health services," he continued.

The new bill will overhaul the public health structure in Ontario which is based on a framework set up by an 1882 statute.

The other standard services being created are in the fields of community sanitation, communicable disease control, family health, home care, nutrition and public health education.

Guidelines for the new regulations are being developed by committees of representatives from health disciplines employed by boards of health, as well as provincial officials. "Core proposals have largely been designed by practitioners who will be delivering the programs."

The proposals include the suggestion that boards of health would be required to offer fluoride therapy, oral hygiene and dental education services to school children.

When you need more disability coverage

Which plan gives you most for your money?

If you bought long-term disability insurance more than 5 or 10 years ago, and haven't increased your coverage, the insurance will no longer protect your standard of living adequately. It's a victim of inflation.

To get the extra insurance you need, you can go to an insurance company. Or you can come to your profession's own disability plan in the Canadian Dentists' Insurance Program. The question is: where do you get the most for your money?

The following table compares the annual premiums paid each year, from age 45 to age 65, for an additional \$1,000 of monthly disability insurance, based on rates quoted by CDIP and a leading insurance company.*

<u>Annual Premium at age</u>	<u>Canadian Dentists' Insurance Program</u>	<u>Typical insurance Company</u>
45	\$ 300.00	\$ 566.80
46	300.00	566.80
47	300.00	566.80
48	300.00	566.80
49	300.00	566.80
50	383.10	566.80
51	383.10	566.80
52	383.10	566.80
53	383.10	566.80
54	383.10	566.80
55	437.30	566.80
56	437.30	566.80
57	437.30	566.80
58	437.30	566.80
59	437.30	566.80
60	477.40	566.80
61	477.40	566.80
62	477.40	566.80
63	477.40	566.80
64	477.40	566.80
Total Premium in 20 years =	\$7,989.00	\$11,336.00

Cost, of course, doesn't tell the whole story. But before you spend that much extra, please make sure you know what, if anything, you're getting in return.

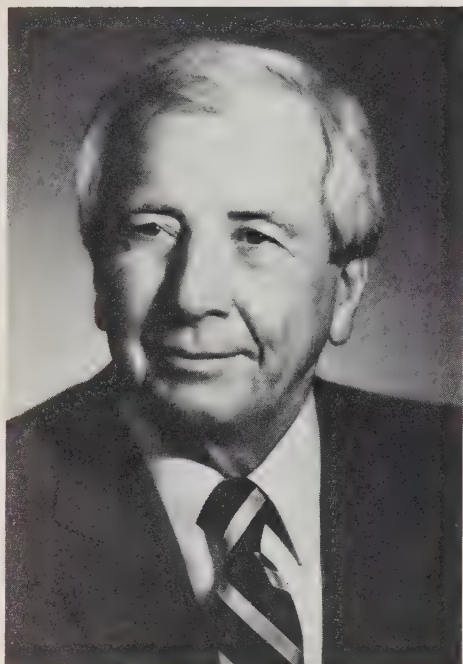
Phone toll free if you need information: we're here to help, not to sell insurance.

* Rates available as of May 1, 1982, for a 45-year-old dentist applying for \$1,000 of monthly benefit to age 65, with 30-day waiting period. The insurance contracts are not identical and rates are subject to change.



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Briefly —



Murray MacDonald

After serving as Executive Director of the Canadian Fund for Dental Education for 15 years, Mr. Murray McDonald officially retired the end of June. He will continue with the Fund on a consulting basis for several days each month until the end of 1982.

Between 1967 and 1975, Mr. McDonald served in the dual capacity of Executive Director of CFDE and Comptroller of CDA. Prior to joining the Fund, he worked as section chairman for the United Appeal Campaign in 1966, and held several positions with Wrigley Canada Inc. from 1948-67 including that of director.

Married and with two children, Mr. McDonald is a member of various community and recreational clubs. He is a former director of both the Canadian Nature Federation and Federation of Ontario Naturalists, and one of his great pastimes is bird watching.

He is an Honorary Fellow of the Canadian Section, International College of Dentists, and Honorary Mem-

ber of the Canadian Dental Hygienists' Association.

♦♦♦♦♦♦♦♦

Dr. Ralph Brooke, chairman of the Department of Oral Medicine, University of Western Ontario, was recently appointed Dean of the Faculty of Dentistry. He replaces Dr. Wesley Dunn, who is retiring after serving in this capacity for the past 17 years.

Dr. Brooke, who has been with the faculty since 1972, began his seven-year term on July 1.

♦♦♦♦♦♦♦♦

For the first time, 13 deans representing 13 of the 16 dental schools in France attended Les Journées Dentaires du Québec, May 23-24.

To further contribute to the international character of this annual event, sponsored by l'Ordre des Dentistes du Québec, the Association Internationale Francophone de recherches Odontologique and the International Analgesia Society held meetings in conjunction with Les Journées Dentaires du Québec.

Dr. Denis Forest, University of Montreal, said the three dental schools in Quebec had wanted to hold an exchange with the deans from France for "a long time."

The exchange, partially supported by the France and Quebec governments, was successful, he said. It provided an opportunity for the deans from both areas to discuss teaching and research programs.

"They were very enthusiastic and impressed with our schools," Dr. Forest said.

He also said it is probable there will be more personal and direct contact between teachers and researchers in Quebec and France.

♦♦♦♦♦♦♦♦

The Canadian Dental Nurses and Assistants Association have now officially changed their name to the Canadian Dental Assistants Association.

Based in Alberta, the Association started work on the name change two years ago, but the new name only became official recently.

Barbara Peterson, president of the Association, said the name change came about "because there are no dental nurses who are officially members of the Association.

"The duties and job description that the Association follows as terms of reference no longer apply to dental nurses, but to dental assistants. Very few dental nurses are trained in simply assisting dentists these days in Canada, although some dental nurses do work in restorative dentistry," she said.

No changes in either officers or structure accompany the name change.

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Mr. Henry M. Thornton (left) awards a \$5,000 cheque to Dr. A.J. Camarda, winner of the first Teacher/Researcher Training Fellowship established in Mr. Thornton's honour by the Canadian Fund for Dental Education.

Dr. A.J. Camarda, a McGill DDS and MSc graduate, recently received the first Henry M. Thornton Fellowship Award from Mr. Thornton, chief executive officer of Dentsply International, at a ceremony in Toronto.

Dr. Camarda, presently working toward a Doctorate in Anatomy at McGill, received a Canadian Fund for Dental Education cheque for \$5,000.

The fellowship, which will be awarded annually, was created in recognition of Mr. Thornton's continuing interest in, and support of,

CFDE's programs to provide a constantly improving level of dental health services for all Canadians.

Dr. Camarda received his BSc from McGill in 1972, his DDS in 1976, and an MSc (Oral Surgery) in 1981.

♦♦♦♦♦♦♦♦

Dr. Joseph-Aubin Doiron, a dentist and native of North Rustico, Prince Edward Island, received an honorary degree at the 1982 convocation ceremonies of the University of Moncton, New Brunswick, recently.

Dr. Doiron, who was invested as an honorary Doctor of Social Sciences, studied dentistry at the University of Montreal. He is a past president of the Prince Edward Island Dental Association, and a former member of the Board of Governors of the Canadian Dental Association. In 1980, he was named Chevalier de Grace of the Order of St. John and Lieutenant-Governor of Prince Edward Island.

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Continuing Dental Education via satellite has been introduced by the University of British Columbia. Five two-hour programs were transmitted in that manner to communities throughout British Columbia earlier this year. Two of the programs were designed for dentists and two for dental hygienists. Because of technical difficulties, the scheduled transmission for the fall of 1981 were cancelled. However, when they were re-scheduled this year, a fifth program was added, for dental hygienists.

The calibre of the clinicians participating in this first series of programs resulted in a favorable response within the dental community. Now Continuing Dental Education is negotiating for programming time in the fall of this year with the Knowledge Network (B.C.'s educational TV network).

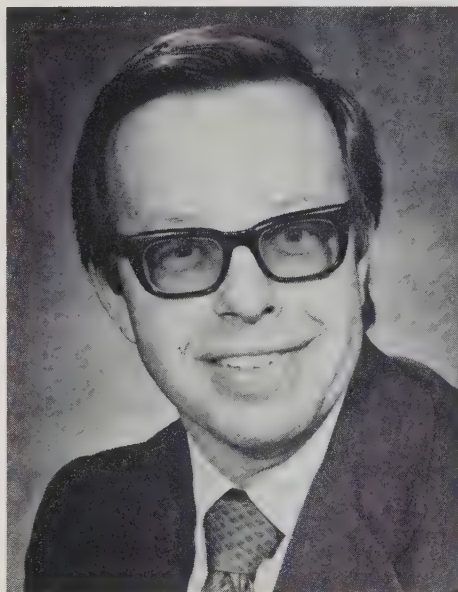
♦♦♦♦♦♦♦♦

At the recent annual meeting of the Canadian Academy of Pedodontics, Dean Ian Bennett of Dalhousie University Faculty of Dentistry was named president for 1982-83.

Past president is Dr. W. Simpson of the University of Alberta Faculty

of Dentistry, the president-elect is Dr. J. Derbyshire, of Calgary, and the secretary-treasurer is Dr. Franklin Pulver of Toronto.

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Dr. W. Robert Patrick

Dr. Robert Patrick, the former mayor of Trenton, Ontario, was elected by acclamation as the first Canadian president-elect of the Academy of General Dentistry at the 30th annual meeting in Boston, held July 10-14. He will automatically become AGD's first Canadian president in 1983.

Dr. Patrick is a graduate of the University of Toronto Faculty of Dentistry and maintains a private practice in Trenton. He is a Fellow of the AGD and was vice-president in 1981. He served two consecutive two-year terms as secretary since 1977 and has been a member of the budget and finance committees. He is a past regional director and was chairman of the 1977 AGD annual meeting in Montréal.

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Toronto residents are being asked to "spit it out" for the Great Silver Hunt.

Anyone spitting the scraps from fillings into the dentist's sink may be helping needy children.

The pieces of residue, which are caught in screens in dental sinks, are part of a lode of scrap silver being collected from about 250 Toronto den-

tist's offices by 30 volunteers from the Ladies Auxiliary of the Academy of Dentistry.

So far this year, the ladies have collected \$3,500 in silver and approximately \$800 in gold.

"With the prices of gold and silver way down this year, we are very pleased with the amount collected so far," said Mrs. P.W. Markle, the auxiliary convener for amalgam and gold. "So far 1,800 ounces of amalgam have been collected," said Mrs. Markle.

The proceeds from the sale of this scrap metal go to the University of Toronto's Faculty of Dentistry to help provide dental care for needy children.

Besides getting a good feeling from helping needy children by collecting amalgam, dentists get another benefit. Any amalgam collected is tax deductible for the dentist.

In 1981, 1,308 ounces of amalgam representing 31 per cent pure silver and one ounce of gold were collected and sold for \$8,000.

The Great Silver Hunt is in its 20th year of operation.

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The executive of the College of Dental Surgeons of British Columbia recently approved retaining the services of a government relations consultant. Dr. Gerald Kristianson, a highly respected observer of the political scene, is now monitoring developments on subjects identified as being of concern to the dental profession, as they emerge in the British Columbia legislature. The service includes covering legislative sessions and maintaining continuous contact at the ministerial and department levels. Dr. Kristianson will also provide regular reports and develop appropriate responses, but he will not attempt to speak for the College in any way. This, he feels, is best done by the College President or delegated executive members. He will undertake specific problem-oriented research assignments and assist in the development of briefs to the government.

New executive, Nova Scotia Dental Association



Following the annual meeting of the Nova Scotia Dental Association at the Halifax Citadel Inn, on June 4, newly-elected executive members posed during the reception. They are, left to right: Dr. Gerald Sheehy, Nova Scotia's Health Minister, who was guest speaker at the dinner; Dr. D.E. MacLeod, New Minas, N.S., immediate past-president; Dr. G.G. Turner, new President, and Dr. Donald E. Williams, President of the Canadian Dental Association.

— Photo by Art Irwin

Contribute geriatric treatment facilities



The Society of Dentistry '82, including all students of the graduating dental class of the University of Alberta, spent a year and a half raising funds to improve dental facilities for the geriatric and disabled persons of Edmonton, Alberta. On May 5, they were able to present an Orthopan 5 and a portable dental unit for the Geriatric Teaching Unit — Youville Memorial Wing, of the Edmonton General Hospital, and also a fully-equipped mobile dental facility for the Rosecrest Home, a hospital for disabled children. The students had raised a total of \$27,817.16. Seen at the presentation ceremony at the Edmonton General Hospital are, left to right: Professor L.C. Leach, Vice-President (Finance and Administration), University of Alberta; Dr. G.W. Thompson, Dean, Faculty of Dentistry, University of Alberta; Donna Wood, Chairman, Society of Dentistry '82; Mrs. M. Toner, Director of Residential Care, Rosecrest Home; Dr. S. Greenhill, Supervisor, Youville Memorial Wing, Edmonton General Hospital; Neville Headley, Vice-Chairman, Society of Dentistry '82, and Alberta's Minister of Hospitals and Medical Care, Dave Russell.

 Canadian
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BULLETIN

Important news
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Normally, death claims from Basic Life Insurance are settled within two weeks of receipt of the claim form and death certificate. Sometimes, however, completion of these documents may be delayed by factors beyond the control of your survivors or beneficiaries.

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There are conditions, of course. The payment can only be made to an adult designated as beneficiary and only in cases where the policy has not been assigned to a third party. We're confident that this new feature will reduce the chances of even temporary hardship. It's one of the ways Canadian Dentists' Insurance Program is trying to serve the profession better.

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CDA Resource Centre/Le Centre de documentation

DENTAL MATERIALS AND TECHNIQUES

Copies of the following articles are available at no charge from the library. Original abstracts which were included with the references are provided below. This bibliography was generated with the help of MEDLARS, a computerized information retrieval system for the health sciences field, which has been operational at the library since February 1982, and is at the disposal of all members.

1. American Dental Association. Council on Dental Materials, Instruments and Equipment. **Dental products accepted/certified by the Council on Dental Materials, Instruments, and Equipment and the Council on Dental Therapeutics.** Journal of the American Dental Association, v.103, no.5, Nov. 1981, pp.813-833.
2. American Dental Association. Council on Dental Materials, Instruments and Equipment. **A status report on resilient denture base materials.** Journal of the American Dental Association, v.103, no. 3, Sep. 1981, pp. 450-451.
3. Brockhurst, P.J. and Cannon, R.W. **Alloys for crown and bridgework.** Australian Dental Journal, v.26, no.5, Oct. 1981, pp.287-294.
Abstract: "The requirements of alloys for metal-ceramic crowns and bridgework are examined. The functional requirements and manipulative behaviour and cost of cheaper alternatives to high gold alloys are discussed. All types used — high gold, reduced gold, silver palladium and base metal — appear to function satisfactorily in the mouth. Nickel and beryllium do not appear to be health hazards. Dental laboratory procedures and materials must be chosen to suit the type of alloy employed, although all alloy types appear suitable for crown and bridgework. The cost of alloy must be carefully examined in the

context of total cost to the patient, and the use of alternatives to gold alloys in many cases may not warrant the required changes to laboratory procedures, but the saving is real, and can make permanent restorations available to greater proportion of the community."

4. Brown, D. et al. **Dental materials: 1979 literature review. Part 1.** Journal of Dentistry, v.9, no.3, Sep. 1981, pp.177-209.
5. Brown, D. et al. **Dental materials: 1979 literature review. Part 2.** Journal of Dentistry, v.9, no. 4, Dec. 1981, pp.271-298.
6. Fredericks, H.E. **Mutagenic potential of orthodontic bonding materials.** American Journal of Orthodontics, v.80, no.3, Sep. 1981, pp.316-324.
7. Gourley, J.M. **Laminate veneers.** Canadian Dental Association Journal, v.47, no.8, Aug. 1981, pp.513-519.
8. Hoag, E.P. and Dwyer, T.G. **A comparative evaluation of three post and core techniques.** Journal of Prosthetic Dentistry, v.47, no.2, Feb. 1982, pp.177-181.
Abstract: "An in vitro study was performed evaluating three post and core techniques with and without full crown coverage on extracted mandibular molar teeth. The materials evaluated were amalgam, composite resin, and stainless steel posts. The results indicate that the method of post and core technique may not be as significant as the placement of full

LES MATÉRIAUX ET TECHNIQUES DENTAIRES

On peut se procurer sans frais à la bibliothèque le texte des articles ci-dessous. Le cas échéant, nous avons repris le résumé qui accompagnait la référence. Cette bibliographie a été dressée grâce à MEDLARS, un système automatisé de recherche documentaire sur les sciences de la santé, que la bibliothèque exploite depuis le mois de février 1982, et qu'elle met au service de tous les membres.

coverage cast-gold crown restorations with sound design and placement of margins beyond the buildup restoration."

9. Jacobsen, P.H. and Robinson, B.P. **Basic techniques and materials for conservative dentistry. 1. Cavity preparation.** Journal of Dentistry, v.8, no.4, Dec. 1980, pp.283-291.
10. Jacobsen, P.H. and Robinson, P.B. **Basic techniques and materials for conservative dentistry. 2. Recent advances in restorative materials.** Journal of Dentistry, v.9, no.2, June 1981, pp.95-100.
11. Lewis, B.B. and Chestner, S.B. **Formaldehyde in dentistry: a review of mutagenic and carcinogenic potential.** Journal of the American Dental Association, v.103, no.3, Sep. 1981, pp.429-434.
Abstract: "For many years there has been controversy over the value of antimicrobial drugs for intracanal dressings in endodontics. Formocresol, a formaldehyde compound, has evolved as the preferred drug for routine endodontic procedures, as well as pediatric endodontics. The increase in the use of formaldehyde has been complicated by the introduction of paraformaldehyde pastes for filling root canals. Neither of these formulas has ever been standardized. The doses are arbitrary, and the common dose of formocresol has been shown to be many times greater than the minimum dose needed for effect."

The efficacy of paraformaldehyde pastes is questionable and remains clouded by inconclusive evidence, conflicting research, inadequate terminology, and a lack of convincing statistical evidence. The clinical use and delivery of formocresol and paraformaldehyde pastes remain arbitrary and unscientific. Formaldehyde has a known toxic mutagenic and carcinogenic potential. Many investigations have been conducted to measure the risk of exposure to formaldehyde; it is clear that formaldehyde poses a carcinogenic risk in humans. There is a need to reevaluate the rationale underlying the use of formaldehyde in dentistry particularly in light of its deleterious effects."

12. Loe, H. **The impact of research and technological advances on dental education.** Journal of Dental Education, v.45, no. 10, Oct. 1981, pp.670-677.
13. Millstein, P.L. **A simplified method for testing the accuracy of interocclusal recording media.** Journal of Prosthetic Dentistry, v.46, no.1, Jul. 1981, p.107.
14. Myers, M.L. **Centric relation records — historical review.** Journal of Prosthetic Dentistry, v.47, no.2, Feb. 1982, pp.141-145.
15. Qvist, V. and Stoltze, K. **Identification of significant variables for pulpal reactions to dental materials.** Journal of Dental Research, v.61, no.1, Jan. 1982, pp.20-24.
16. Re, G.J. **A method for making matrix material dead soft.** Journal of Prosthetic Dentistry, v.46, no.2, Aug. 1981, p.224.

17. Smith, D.C. **Dental materials today. Part 1: Perspectives — past and present.** Ontario Dentist, v.57, no.12, Dec. 1980, pp.16-19.
18. Smith, D.C. **Dental materials today. Part 2: Current developments.** Ontario Dentist, v.58, no.3, Mar. 1981, pp.11-14.

1982 Teaching Conference Report: The Teaching of Oral Pathology in the Undergraduate Dental Curriculum. This report of CDA/ACFD Teaching Conference in April is now available to all interested parties upon request, from the CDA Library in Ottawa.

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La table ci-dessous présente la prime annuelle payable de 45 ans à 65 ans pour un supplément de \$ 1 000 par mois d'assurance Invalidité, d'après les tarifs donnés par le RADC et une grande compagnie d'assurance.*

Age	Prime annuelle	
	RADC	Assureur
45	\$ 300,00	\$ 566,80
46	300,00	566,80
47	300,00	566,80
48	300,00	566,80
49	300,00	566,80
50	383,10	566,80
51	383,10	566,80
52	383,10	566,80
53	383,10	566,80
54	383,10	566,80
55	437,30	566,80
56	437,30	566,80
57	437,30	566,80
58	437,30	566,80
59	437,30	566,80
60	477,40	566,80
61	477,40	566,80
62	477,40	566,80
63	477,40	566,80
64	477,40	566,80
Prime totale payée en 20 ans	\$ 7 989,00	\$ 11 336,00

Le coût n'est évidemment pas le seul élément à considérer. Mais avant de payer un supplément de cette importance, essayez de connaître les éventuels avantages que vous en tirerez.

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* Les tarifs indiqués sont ceux offerts au 1^{er} mai 1982 pour un dentiste de 45 ans demandant une indemnité mensuelle de \$ 1 000 jusqu'à 65 ans, avec une période d'attente de 30 jours. Les contrats diffèrent et les tarifs peuvent changer.



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L'Ordre des dentistes du Québec contre le gouvernement?

L'Ordre des dentistes du Québec étudie présentement la possibilité de poursuivre en justice le gouvernement du Québec à cause de la nouvelle loi que celui-ci a adoptée, permettant aux hygiénistes dentaires d'administrer des soins qui, jusqu'à présent, étaient traditionnellement réservés aux dentistes. L'ODQ croit que cette disposition représente "un danger pour le public."

L'ODQ pourrait également contester la prétention du gouvernement à vouloir exercer un contrôle sur tous les groupes professionnels de la province, a déclaré le président de l'ODQ, le Dr Jean-Guy Landry. Suivant la tradition, les professionnels constituent l'autorité dans les limites de leur profession. Aussi l'ODQ fait-il des démarches auprès des démarches auprès des autres corps professionnels de la province dans l'intention d'envoyer une délégation collective à Québec.

La tempête a débuté quand le gouvernement Lévesque, afin d'économiser annuellement 45,7 millions de dollars, a annoncé que le nombre des services de santé serait réduit.

Selon la *Gazette* du 2 juin dernier, la nouvelle loi restreint les services prévus par le programme de santé dentaire gratuit à l'intention des enfants âgés de 15 ans ou moins, ce qui permettra au gouvernement d'épargner de 25 à 28 millions de dollars par année.

Avant l'adoption de la nouvelle loi, le premier ministre René Lévesque a déclaré que l'ancien programme aurait bientôt exigé près de cent millions de dollars par année. "À notre avis, a-t-il dit, cette somme est excessive par rapport aux bénéfices."

Toutefois, le signal de guerre pour les dentistes a été donné quand M. Lévesque a expliqué: "Ceci veut dire que les hygiénistes dentaires seront dorénavant responsables d'admini-

strer un assez grand nombre de services que, jusqu'à présent, la tradition réservait aux dentistes."

Seize "nouveaux services"

En vertu du nouveau programme, les hygiénistes et les assistantes dentaires peuvent effectuer 16 nouveaux services, y compris la prise des radiographies dentaires; le test de vitalité pulpaire; la prise d'empreintes pour les modèles d'étude; l'insertion, le modelage et le finissage des ciments au silicate, à l'acrylique, composés, à l'amalgame et de fond de cavité; le scellement des couronnes et des bridges temporaires; l'enlèvement des points de suture en parodontie; le choix, l'installation et le retrait des bagues d'orthodontie; l'installation et le retrait des pâtes de protection pour gingivectomie; le rescellement des dispositifs temporaires pour maintenir des espaces.

Alors que ces fonctions s'accompliront sous la surveillance du dentiste, sept autres services seront rendus avec plus ou moins de surveillance. Ce sont le polissage des obturations sans forage, le détartrage des dents et le polissage des racines, l'administration de soins dentaires prophylactiques, l'application topique de fluor ou d'une solution désensibilisée, le scellement des puits et des fissures, l'application de vernis protecteurs, l'installation et l'enlèvement des pansements quand la pulpe n'est pas exposée et qu'aucun forage n'est requis.

Ces nouvelles dispositions "vont à l'encontre de l'opinion générale exprimée par la profession et mettent en danger le régime d'administration des soins, nuisent à l'accessibilité des services dentaires et à leur qualité," le Dr Landry a-t-il prévenu les membres de l'ODQ.

Aussi voit-il dans la nouvelle loi "une tentative regrettable faite par le gouvernement pour avoir autorité sur

les dentistes et les professions en général."

"Dommages irréparables"

Selon le Dr Pierre-Yves Lamarche, directeur général de l'ODQ, le gouvernement péquiste, en décidant de donner plus de responsabilités aux hygiénistes, risque d'exposer les patients à des "dommages irréparables" parce que les assistantes formées dans les cégeps ou les collèges feront le travail d'un dentiste possédant une formation universitaire.

La nouvelle loi permet aux hygiénistes qui ont suivi un cours de trois ans dans un collège de rendre les services mentionnés plus haut.

Les hygiénistes continueront à enseigner l'hygiène dentaire et, sous la surveillance du dentiste, à l'aider à déterminer la cause des caries.

Le Dr Lamarche a fait remarquer qu'en tant qu'ordre professionnel groupant les 2 577 dentistes du Québec, l'ODQ reconnaît depuis longtemps que les fonctions des hygiénistes dentaires de la province doivent être augmentées.

Cependant, il s'oppose à la nouvelle loi qui leur permet de poser des diagnostics touchant les maladies gingivales et les caries sans consulter un dentiste au préalable.

En vertu de cette loi, a-t-il expliqué, "l'hygiéniste n'a pas besoin de consulter le dentiste et celui-ci ne peut exiger de vérifier le travail de l'hygiéniste. C'est là un très grand danger!"

Manque de formation

Quant au Dr Landry, il s'objecte à la nouvelle loi parce que les hygiénistes n'ont pas reçu la formation pour pouvoir diagnostiquer de façon compétente les caries et les problèmes gingivaux.

Les hygiénistes, a-t-il ajouté, pourront maintenant rendre ces services sous une "surveillance lointaine" qui,

“à toutes fins pratiques, permet aux hygiénistes supervisées de décider si elles veulent ou non consulter leur superviseur.” De plus, a-t-il poursuivi, “c’est un fait bien connu que la consultation n’oblige en rien la personne qui consulte. De fait, cette surveillance lointaine est une farce, puisqu’elle donne à l’hygiéniste une autorité presque totale.”

Par ailleurs, le Dr Landry s’est dit agacé par le fait que, “malgré l’opposition d’une grande majorité de professionnels et défiant toute attente, le ministre permet aux hygiénistes dentaires de faire des obturations.

“Le ministre a fait fi de l’accessibilité aux soins dentaires et de leur qualité,” a-t-il ajouté.

C’est pourquoi il a demandé aux membres de l’ODQ de “réagir très vigoureusement avec tous les moyens disponibles.” Il les a exhortés à continuer à donner leur appui “aux procédures de la délégation” afin de “mieux assurer la protection du public et l’administration de soins dentaires de qualité, et ce par égard pour la profession.”

Réponse massive

L’ODQ a envoyé à tous ses membres une copie de la nouvelle loi accompagnée d’une lettre indiquant la position officielle de l’ODQ touchant les services dentaires confiés aux hygiénistes. De plus, l’association a demandé aux membres de signer un

engagement personnel pour manifester qu’ils l’appuyaient.

En trois semaines, environ 1580 membres ont signé l’engagement et l’ont retourné à l’ODQ.

L’ODQ s’est proposé de faire un second envoi ayant pour objectif, de dire le Dr Landry, “d’atteindre au moins 2000 de nos membres.”

De plus, a-t-il ajouté, nous avons envoyé des lettres officielles au gouvernement provincial et au Premier Ministre du Canada, décrivant les réactions de l’ODQ jusqu’au début de juillet.

M. Trudeau a déjà répondu à l’ODQ et écrit au gouvernement du Québec, lui suggérant de donner suite à cette affaire.

Le brig.-gén. James N. Wright devient directeur général des services dentaires



Brig.-Gen. James N. Wright

Le brigadier-général James N. Wright a assumé, le 25 juin 1982, la direction générale des services dentaires des Forces canadiennes, succédant ainsi au brigadier-général William Thompson, président-élu de l’ADC.

Originaire de Lethbridge (Alberta), il apporte à ce poste une vaste expérience sur le plan académique, professionnel et militaire. Le général Wright a commencé sa carrière militaire en s’inscrivant au programme de formation des officiers, à l’Université de l’Alberta. Il est devenu militaire à plein temps en 1956, après avoir obtenu son diplôme en médecine dentaire. Spécialiste reconnu en périodontie, il détient une maîtrise en pathologie buccale et un diplôme du collège de la Défense nationale.

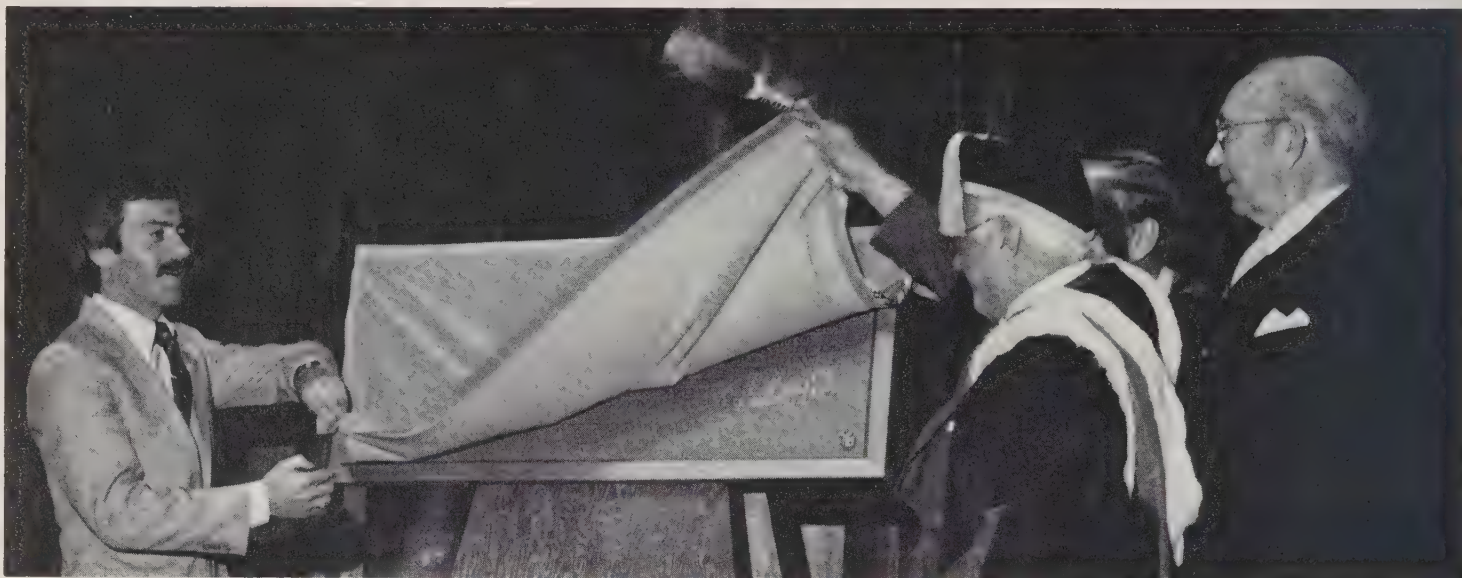
Le général Wright a servi à titre de conseiller principal en médecine dentaire auprès de la force d’urgence des Nations Unies en Egypte, puis à titre de chargé de mission à la division des services dentaires et de directeur des soins dentaires au quartier général de la Défense nationale.

Dans le civil, il s’est occupé de diverses organisations dentaires à titre, entre autres, de délégué auprès de l’Association des facultés de médecine dentaire du Canada, de représentant au Conseil de l’éducation de l’ADC, à la Conférence provinciale des secrétaires dentaires et à la nouvelle Conférence des organismes provinciaux de réglementation. Il fait également partie de l’équipe chargée de l’agrément des études post-universitaires au Conseil de l’éducation, ainsi que du Bureau des gouverneurs de l’ADC.

Le général Wright a reçu en 1977 un fellowship du Collège international des dentistes, en reconnaissance de sa contribution à la médecine dentaire. En 1980, il était fait chirurgien dentaire honoraire de la reine Elizabeth II.

Il vit à Ottawa avec sa femme, Elaine, et leurs trois filles.

Deux dentistes des Maritimes sont honorés à l'Université Dalhousie



À l'Université Dalhousie, une plaque commémorant l'inauguration officielle de l'édifice dentaire de 21 millions de dollars est dévoilée par, de gauche à droite, le ministre de l'Éducation de la Nouvelle-Écosse, M. Terry Donahoe, le sénateur Henry Hicks, et le président du Conseil d'administration de l'Université Dalhousie, M.A. Gordon Archibald.

Le 18 juin dernier, à l'occasion de la XII^e Conférence biennale sur la recherche et l'enseignement dentaires au Canada, l'Université Dalhousie a décerné le titre de Docteur en droit, honoris causa, à deux dentistes distingués des Maritimes.

Le premier, le Dr Donald E. Williams, est président de l'Association dentaire canadienne et réside à Moncton, au Nouveau-Brunswick. Diplômé de l'école dentaire de l'Université Dalhousie en 1955, le Dr Williams a été honoré par le président et vice-chancelier de cette université, le Dr W. Andrew MacKay, qui a déclaré: "Je ne me souviens pas que nous ayons jamais eu un aussi grand nombre de dentistes à Halifax."

Le second à être honoré, le Dr Hazlett Saunders Crosby, peut s'enorgueillir d'une longue et remarquable carrière comme dentiste, professeur et soldat. Il enseigne toujours à son alma mater.

Le doyen de la Faculté de dentisterie de l'Université Dalhousie, le Dr Ian C. Bennett, a déclaré que l'honneur conféré au Dr Williams lui était dû depuis longtemps. Par ailleurs,

a-t-il remarqué, "il y a toujours eu une collaboration fructueuse entre l'Université Dalhousie et l'ADC et nous espérons que cette collaboration se poursuivra."

Inauguration

À la même occasion, le sénateur Henry Hicks, représentant le ministre de Santé et Bien-être social Canada, Mme Monique Bégin, et le Secrétaire d'État, M. Gerald Regan, le ministre de l'Éducation de la Nouvelle-Écosse, M. Terry Donahoe, représentant le premier ministre de la province, M. Buchanan, et M.A. Gordon Archibald, président du Conseil d'administration de l'Université Dalhousie, ont inauguré le nouvel immeuble de 21 millions de dollars de la Faculté de dentisterie.

Il s'agit d'une construction de cinq étages érigée à partir d'une structure déjà existante. Le tout marie habilement l'ancien et le nouveau. L'immeuble a été entièrement subventionné par le gouvernement fédéral et ceux de la Nouvelle-Écosse, du Nouveau-Brunswick et de l'Île-du-Prince-Édouard. Ses locaux peu-

vent accommoder un maximum de 64 élèves en hygiène dentaire et en dentisterie.

"L'enseignement dentaire se porte bien à l'Université Dalhousie," a déclaré le Dr Ralph Y. Barolet, président sortant de l'Association des Facultés dentaires du Canada, tout en félicitant l'Université Dalhousie au nom de cette association. "Il s'agit d'un jour mémorable pour le Canada et l'Université Dalhousie pourra se tourner vers le XXI^e siècle avec une confiance nouvelle."

Pour sa part, le ministre de l'Éducation, M. Donahoe, a remarqué que l'Université Dalhousie a atteint, au cours des 75 années de son histoire, "une norme d'excellence dans l'enseignement qui est généralement reconnue" et que la nouvelle construction va assurer le maintien de cette réputation.

Après la collation des grades, l'assemblée académique a quitté l'auditorium Rebecca Cohn et s'est rendue au nouvel immeuble où une plaque dévoilée officiellement a été fixée à l'un de ses murs.

La fluoration: Comment gagner un référendum

Les tenants de la fluoration ont perdu plus d'un référendum parce qu'ils ont cru qu'il s'agissait d'un sujet scientifique, alors que la question était, de toute évidence, "plus politique que scientifique."

Même si les tenants le savent, il est difficile de communiquer au grand public que la fluoration est sûre et efficace et que le fluorure peut réduire la carie dentaire des deux tiers.

Traitant des "Stratégies d'application du fluorure", le Dr Patrick Blahut, professeur adjoint et chef de la Division de la dentisterie communautaire à l'Université Dalhousie, à Halifax, a précisé que les tenants de la fluoration et leurs antagonistes se sont montrés "aux antipodes" dans le passé et qu'au moment du vote, "les contres gagnaient naturellement."

S'adressant, le 19 juin, à la XII^e Biennale canadienne de la recherche et de l'enseignement dentaires, qui a eu lieu à Halifax, le Dr Blahut a ajouté que l'information transmise de part et d'autre sur la question était si variée que les gens "en sont tout confus et se montrent très prudents."

Le dentiste de pratique privée peut jouer un rôle important sur le plan de la stratégie. "Essayez d'éduquer, au jour le jour, les gens que vous recevez dans votre cabinet, notamment ceux qui ont beaucoup d'influence dans la localité," de dire le Dr Blahut.

"Touchez ceux qui agissent," dit-il, avant même que la controverse n'éclate. "Parlez-leur, donnez-leur de la documentation. Gagnez-les à votre cause." Puis, quand vient la controverse, "prenez de nouveau contact avec les personnes intéressées. Elles pourraient faire de bons meneurs du mouvement en faveur et seraient peut-être prêtes à s'engager dans la communauté."

La meilleure façon de gagner le scrutin, dit-il, c'est de se faire voir le plus possible avant le référendum.

Menez la campagne par des messages courts et simples (ne faites pas pleuvoir les messages scientifiques), évitez les débats publics, gardez une image positive, pas réactionnaire, faites valoir le soutien des notables "de la place" (il est plus efficace de faire intervenir les autorités locales et les dentistes que ceux venant "de l'extérieur"), et souvenez-vous: "la question est politique, pas scientifique."

Pourquoi s'oppose-t-on?

Les gens s'opposent à la fluoration surtout parce qu'ils n'en connaissent pas le but, dit-il. Ils peuvent aussi s'y opposer parce qu'ils ont une attitude anti-scientifique, tels les environmentalistes qui croient qu'on "joue avec la Nature," parce qu'ils sont relativement moins connaissant, ou contre l'autorité, parce qu'ils se voient désavantagés, parce ce qu'il y voit une autre forme d'intervention du gouvernement, ou simplement parce qu'ils se sentent "aliénés".

Un incident survenu à Cleveland (Ohio) a fait voir le ridicule de certaines oppositions, alors qu'on s'était préparé à fluorer l'eau sans cependant donner suite au projet. Le jour où la mesure devait prendre effet, on a reçu nombre d'appels téléphoniques à l'effet que le chat refusait de boire son eau, que les plantes de la maison mouraient, bref, on voyait toutes sortes de prétendus symptômes. Et les gens demandaient qu'on "retire" le fluor, de noter le professeur Blahut.

Le conférencier fait remarquer qu'il y a eu très peu de controverses politiques avant 1950, mais que, lorsqu'elles ont commencé à se manifester, les antagonistes "se sont mis à utiliser toutes les astuces du manuel."

Dans les débats publics, ils font valoir la plupart du temps que la fluoration n'est pas efficace, qu'elle est dangereuse, que c'est de la médication de masse qui va "à l'encontre des libertés civiles."

Il est commun, de nos jours, d'attribuer à la fluoration certaines maladies telles l'arthrite ou le cancer. "Dès que le mot magique est lancé, le "cancer" par exemple, vous êtes défaits," dit-il.

L'information que reçoit le contribuable avant le référendum se faisant discordante, le résultat négatif du scrutin est souvent très surprenant. L'électeur en vient à se méfier des explications scientifiques et à croire les accusations du profane et les "déclarations intempestives" rapportées dans les journaux. "Si c'est imprimé, il croit que c'est vrai," dit-il.

Aux tenants de la fluoration qui ont "tendance à présenter le même message partout," le Dr Blahut rappelle que la situation varie d'une localité à l'autre.

Avoir à répondre aux arguments des antagonistes a ceci de bon, dit-il: "Nous devons agir. Nous devons revenir sur le sujet et en réexaminer l'enjeu. Nous ne pouvons pas nous contenter de réaffirmer que le fluorure est sûr et efficace. Et il y a beaucoup de bons textes de référence, de bons livres sur le sujet."

Congrès international

Le congrès international de l'Association dentaire française se tiendra à Paris, du 23 au 27 novembre 1982.

Le programme scientifique comprendra un exposé en deux parties sur la parodontologie (examen, diagnostic, plan de traitement et traitement d'une parodontite marginale), une discussion sur la situation actuelle et les perspectives d'avenir touchant la céramique, sur la prévention et sur les prothèses maxillo-faciales.

Pour recevoir le programme provisoire du congrès, on écrira au Secrétariat, 92, Avenue de Wagram — 75017, Paris (France).

Ottawa cherche à contrôler les services de santé, affirme un professeur de Dalhousie

Le gouvernement fédéral cherche à contrôler les programmes de santé au Canada, "parce qu'il considère important d'établir un programme à l'échelle du pays pour promouvoir l'unité nationale."

Le professeur Larry Nestman, directeur du programme d'administration des services de santé à l'Université Dalhousie, a fait cette déclaration le 18 juin, alors qu'il traitait des questions afférentes à la médecine dentaires lors d'une séance de formation continue à la faculté de médecine dentaire de cette institution.

Traitant de "L'intervention du gouvernement en médecine dentaire: conflit, collaboration ou tolérance," le professeur Nestman a précisé que le gouvernement fédéral voulait intervenir directement dans le domaine de la santé, de façon à ce que la population sache l'importance des contributions fédérales autant que provinciales.

Le conférencier croit également que s'il obtient le contrôle financier des services de santé, le gouvernement fédéral pourra mettre au point un programme national d'assurance-santé.

Les gouvernements provinciaux continueront cependant, de se battre sur cette question. Beaucoup de provinces ont déjà leur propre programme et veulent continuer à administrer et à contrôler la prestation des services sociaux et de santé, à établir les politiques fiscales et à contrôler les subventions, indépendamment de l'autorité fédérale.

Un grand remue-ménage fédéral

Le gouvernement fédéral projette déjà, cependant, de fondre la loi des soins médicaux et la loi des hôpitaux en un seul document, entraînant une "modification en profondeur des structures," de dire le professeur Nestman.

Selon lui, Santé et Bien-être

Canada se prépare à "rogné sur l'organisation des services de santé du pays." Les rôles changeront, "Et, pour l'ensemble du pays, nous nous retrouvons dans un mouvement de protection," dit-il.

Le professeur Nestman croit qu'il y aura des conflits entre le gouvernement et les citoyens, parce que les changements "influenceront sur notre mode de vie et modifieront de façon draconienne le rôle des professions." La prestation des services professionnels de la santé changera considérablement et il faudra trouver d'autres modes de rémunération.

Les professionnels ont actuellement comme réaction de "s'opposer à toute forme d'intervention gouvernementale," dit-il. Ils s'opposeront aussi à tout changement concernant la qualité des soins ou le déplacement des services. Le débat porte de plus en plus sur la protection de l'autonomie professionnelle.

Les provinces canadiennes cherchent actuellement à modifier la prestation des services de santé avec le concours des professions autonomes.

Dans le cadre de son programme visant à obtenir le contrôle des services à l'échelle nationale, le gouvernement fédéral cherche à colliger dans le détail des informations sur les services de santé du pays et le revenu des professionnels concernés. "Plus on est informé, plus on a de pouvoir," de dire le professeur Nestman, ajoutant qu'à son avis ce sont les bureaucrates qui exerceront ce pouvoir.

Le rationnement des services

Le conférencier a décrit les services de la santé comme étant "une industrie en pleine croissance dans une économie en plein resserrement". Aussi, à son avis, le risque de voir ces services rationnés ne cesse d'augmenter au pays.

"Pour la première fois," dit-il, "des administrateurs sont congédiés pour

avoir trop dépensé. Le grincement des freins se fait entendre avec fracas." Cela peut engendrer un dilemme grave pour les services de santé qui doivent augmenter pour répondre aux besoins de plus en plus grand d'une population qui vieillit, alors que des études récentes recommandent une "intervention radicale" dans les budgets de la santé.

L'honoraire supplémentaire, une question brûlante

Le rapport Hall a recommandé, en 1980, que les professionnels participant aux régimes d'assurance-santé reçoivent une rémunération plus élevée, sans recourir à l'honoraire supplémentaire. Il a aussi suggéré le recours à l'arbitrage obligatoire pour résoudre les différends concernant les salaires. Aujourd'hui, cependant, les professionnels considèrent qu'il s'agit là d'un "moyen grossier et brutal" de trancher des négociations aussi délicates.

L'honoraire supplémentaire est une "question brûlante," selon le professeur Nestman. La discussion se poursuit sur la façon de "vider la question". Santé et Bien-être Canada préfère ne pas le proscrire entièrement et le débat continue "avec férocité."

L'intervention des femmes

La venue des femmes dans un domaine "traditionnellement réservé aux hommes" a été un des éléments importants qui ont marqué l'évolution des professions de la santé, selon le professeur Nestman.

"Les femmes apportent une manière de voir et d'agir différente," dit-il. Plusieurs s'intéressent, à son avis, à la perspective d'un travail de neuf à cinq, ce qui rend la question du salaire "très attrayante", par rapport à la rémunération professionnelle à l'acte.

"La sociologie de la pratique de la médecine dentaire évolue très rapidement depuis l'arrivée des hygiénistes et des infirmières dentaires," dit-il.

Restrictions apportées au régime d'assurance dentaire de Terre-Neuve

Suivant sa politique de restrictions, le gouvernement de Terre-Neuve vient de diminuer le nombre des services offerts en vertu du régime d'assurance dentaire pour les enfants.

Tout en s'inquiétant des conséquences que ces nouvelles mesures auront sur la santé dentaire des enfants, les dentistes de la province sont surtout ennuyés par la manière dont on a mis le nouveau programme en vigueur.

Selon le secrétaire exécutif de l'Association dentaire de Terre-Neuve, le Dr Toby Gushue, le gouvernement n'a consulté ni le Conseil exécutif de l'ADTN ni aucun de ses représentants. Ceux-ci ont appris la nouvelle par la voie des journaux.

À l'assemblée semi-annuelle de l'ADTN qui a eu lieu peu après, deux décisions ont été prises, l'une recommandant qu'on demande aux ministres de la Santé et des Finances de rencontrer des membres de l'association au sujet des services supprimés, et l'autre déclarant: "Nous sommes bouleversés de constater que la raison d'être de ce programme ait été niée par les récentes restrictions budgétaires touchant des soins de prévention qui sont nécessaires. Nous demandons que cette mesure des plus régressives soit abrogée."

Faisant suite à ces décisions, l'ADTN a proposé de subventionner une grande part des services de prévention pourvu que le gouvernement consente à les réinstaurer. "Nous avons même offert de réduire nos honoraires, ce qui aurait fait épargner 400 000\$ au gouvernement," a remarqué le Dr Gushue, "mais celui-ci a refusé."

Le ministre de la Santé, M. Wallace House, a estimé que les restrictions constitueraient une économie annuelle de 600 000\$.

Les restrictions touchent principalement le nombre des enfants exami-

nés et les traitements au fluor permis (réduits de deux à un par année).

Selon le Dr Gushue, le corps législatif de Terre-Neuve n'a pas l'habitude de ne pas consulter les intéressés avant d'annoncer une décision. "On a toujours communiqué avec nous auparavant," a-t-il dit.

Présentement, "il s'agit d'une affaire politique épineuse à Terre-Neuve," a-t-il poursuivi, et "grâce aux médias, il y a eu un débat public."

Assistance record aux Journées dentaires du Québec 1982

Grâce à une assistance record de 4 702 personnes provenant du Canada, des États-Unis et de divers pays francophones, les Journées dentaires du Québec 1982 ont enregistré un succès sans précédent.

Le congrès a eu lieu à Montréal, les 23 et 24 mai dernier. Des 4 702 congressistes, 1 722 étaient des dentistes dont 49 venaient de pays francophones, y compris 13 doyens parmi les 16 écoles dentaires de France. On comptait également plusieurs représentants de la Guadeloupe et du Liban.

Il va de soi que la participation canadienne était la plus nombreuse. Quant aux États-Unis, ils étaient

Malheureusement, certains avis ont été mal interprétés.

À ce moment-là, l'ADTN cherchait à avoir des rencontres plus fréquentes avec les ministres de la Santé et des Finances.

Toutefois, de conclure le Dr Gushue, "il semble y avoir de la lumière au bout du tunnel." Le gouvernement a indiqué qu'il songeait à restaurer au moins une partie des services supprimés.

représentés par près de cent dentistes.

Le programme scientifique couvrirait divers sujets. Il comprenait entre autres un cours de deux jours donné par les Drs Richard Klein et Ralph O'Connor avant le congrès et portant sur la gestion du cabinet, ainsi qu'un exposé sur l'alimentation et la santé par Covert Bailey. Par ailleurs, les assemblées tenues par l'Association internationale francophone de recherches odontologiques et la Société internationale d'analgésie avec les Journées dentaires du Québec ont contribué à donner un caractère international à ce congrès annuel parainé par l'Ordre des dentistes du Québec.

Régime d'épargne-retraite de l'ADC

Les valeurs respectives du Régime d'épargne-retraite de l'Association Dentaire Canadienne étaient les suivantes au 30 juin 1982.

Fonds d'actions ordinaires	\$43.9638
Fonds à revenu fixe	\$27.5030
Fonds garanti	\$23.6059
Fonds de placement	\$10.0088

L'avoir total (valeur marchande) du régime s'élevait à \$28,065,692.

Au 31 mai 1982, les chiffres du mois précédent étaient les suivants:

Fonds d'actions

ordinaires	\$48.2337
Fonds à revenu fixe	\$27.8573
Fonds garanti	\$23.3235
équilibré	\$10.7315

L'avoir total (valeur marchande) du régime s'élevait à \$29,679,534.

Pour de plus amples renseignements, veuillez écrire à l'adresse suivante: Canadian Dental Service Plans Inc., Ste. 600, 2 Lansing Square, Willowdale, Ontario M2J 4Z3, ou appeler le service de renseignements du CDSPI en composant 1-800-268-5418 (497-7171 pour les résidents de Toronto).

La vérité touchant les assurances

Cet article est le premier d'une série préparée par les CDSPI et intitulée: "La vérité touchant les assurances." Les CDSPI veulent ainsi renseigner leurs assurés au moyen de cas réels qui, parce qu'ils sont d'un intérêt humain et présentent des faits familiers pour le dentiste, donneront à celui-ci un aperçu utile sur la question des demandes d'indemnité.

LA VÉRITÉ TOUCHANT LES ASSURANCES, CAS N° 1

Le 8 février 1980, un dentiste a été frappé par une voiture pendant qu'il effectuait des réparations sur la sienne le long d'une route. À la suite de cet accident, il réclama de ses assureurs une indemnité pour invalidité prolongée.

Le dentiste avait subi des coupures et des contusions. De plus, le démonte-pneu s'était enfoncé dans sa main droite, causant des dommages sérieux aux nerfs. L'opération de cette blessure exigeait une longue convalescence.

Le dentiste fit une demande d'indemnité pour invalidité prolongée afin d'obtenir une allocation mensuelle de 1 400\$, plus les frais généraux de son cabinet qui s'élevaient à 4 400\$ par mois. Il toucha les premiers versements rapidement et ses assureurs lui promirent de faire tout leur possible pour l'aider.

Une étude de son cas révéla qu'il y aurait avantage à donner à cette demande d'indemnité une attention personnelle. La compagnie d'assurance prit donc les dispositions nécessaires pour qu'un conseiller professionnel rendît visite au dentiste.

Dans une lettre adressée à la compagnie, celui-ci se disait "étonné" de voir que son problème avait été étudié de façon personnelle. "Il est rassu-

rant," ajoutait-il, de découvrir un visage derrière les imprimés informatiques. Je ne peux assez vanter les avantages que peut recevoir une personne comme moi en rencontrant quelqu'un disposé à l'écouter et à juger la situation que je dois envisager. Notre profession devrait être mise au courant des services accordés au dentiste handicapé."

Dans ce cas particulier, le dentiste est retourné au travail, mais parce que ses heures étaient abrégées et que son rendement n'étaient pas élevé, ses revenus étaient moindres. Aussi la dernière indemnité réclamée a-t-elle dû être calculée sur une perte de revenu de 86 pour cent. Tout indique qu'il devra toucher encore longtemps des allocations pour invalidité partielle.

"Bien que les dommages causés à ma main paraissent minimes en fonction des activités ordinaires," de déclarer le demandeur, "ils nuisent encore à mon rendement comme dentiste."

"Disons que mes recettes brutes baissent d'environ 20 pour cent. Les frais généraux du cabinet restant les mêmes, il s'ensuit une baisse de mon revenu net d'environ 60 à 70 pour cent. C'est alors que la clause d'invalidité partielle devient très utile, — puisque le calcul est effectué sur le revenu net et non sur le revenu brut."

Très souvent, la vérité sur les assurances diffère beaucoup de ce qu'on pense. Le Journal de l'ADC fera paraître prochainement d'autres articles établissant la vérité sur ces questions importantes.

MNSD: Gagnantes du concours

Cette année, le concours d'affiches tenu à l'occasion du Mois national de la santé dentaire a mis seulement des demoiselles à l'honneur dans les trois catégories. La sélection des affiches gagnantes a eu lieu au siège social de l'ADC, à Ottawa, le 21 juin dernier.

Kari Dietrich de l'école primaire de Qualicum Beach (Colombie-Britannique) a été la seule élève d'une maternelle à s'inscrire au concours et on lui a accordé le prix de la catégorie des élèves de la maternelle et de la première année. Son affiche montre un joyeux lapin vert tenant une brosse à dents et souhaitant à tous: "Hoppy Brushing!" (Un brossage sautillant!)

La gagnante de la catégorie des élèves de la deuxième à la quatrième année habite également en Colombie-Britannique à Elko Lake plus précisément. Il s'agit de Louise Zwozdeski qui fréquente l'école primaire de

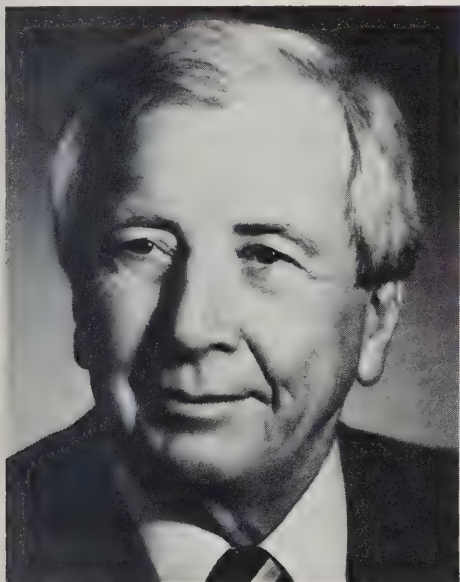
Baynes Lake. Elle a peint une affiche reproduisant sur une bannière le thème anglais du MNSD: "Smile Canada" sous laquelle se trouvent, souriant fièrement, des représentants des diverses races au Canada.

Dans la catégorie des élèves de la cinquième à la septième année, la palme a été décernée à Michelle Cameron, élève de sixième année à l'école primaire de New Victoria (Nouvelle-Écosse). Celle-ci a dessiné une dent qui se protège de la plaque au moyen d'une feuille d'érable portant le thème du MNSD.

Le jury se composait de M. Jim McPherson, propriétaire de la galerie Den Art à Ottawa, du Dr Michel Carvonis, président du Mois national de la santé dentaire, et de M. Hubert Drouin, directeur général de l'ADC.

Les gagnantes recevront des prix de l'ADC au siège social, à Ottawa.

En Bref —



Murray McDonald

Directeur général du Fonds canadien pour l'enseignement dentaire, pendant 15 ans, M. Murray McDonald a pris officiellement sa retraite à la fin du mois de juin. Il continuera cependant de consacrer plusieurs jours par mois au Fonds, à titre de conseiller, d'ici la fin de 1982.

De 1967 à 1975, M. McDonald a occupé deux postes à la fois, celui de directeur général du FCED et de contrôleur de l'ADC. Avant de se joindre au Fonds, il a été président de section lors de la campagne de 1966 de Centraide et occupé, de 1948 à 1967, divers postes chez Wrigley Canada Inc., y compris celui de directeur.

Marié et père de deux enfants, M. McDonald fait partie de divers clubs communautaires et récréatifs. C'est un ancien directeur de la Fédération de la nature du Canada et de la Fédération des naturalistes de l'Ontario, l'ornithologie est son passe-temps favori.

Il est membre honoraire de la section canadienne du Collège international des dentistes et de l'Association des hygiénistes dentaires du Canada.

♦♦♦♦♦♦♦♦

Les doyens de treize des seize facultés de médecine dentaire de France ont participé pour la première fois aux Journées dentaires du Québec, qui ont eu lieu les 23 et 24 mai.

Ajoutant au caractère international de cette manifestation annuelle, parrainée par l'Ordre des dentistes du Québec, deux autres organismes se sont réunis en même temps qu les Journées dentaires, à savoir: l'Association internationale francophone de recherche odontologique et la Société internationale d'analgésie.

Le Dr Denis Forest, de l'Université de Montréal, a précisé que les trois facultés de médecine dentaire du Québec désiraient "depuis un bon moment déjà" cet échange avec les doyens de France.

La rencontre, qui a reçu l'appui des gouvernements de France et du Québec, a été une réussite, selon le Dr Forest. Elle a donné aux doyens des deux territoires l'occasion de discuter des programmes d'enseignement et de recherche.

"Ils ont été fort impressionnés par nos facultés et ont manifesté un très grand intérêt", de dire le Dr Forest, ajoutant que cette rencontre sera probablement suivie de contacts plus personnels et plus directs entre professeurs et chercheurs du Québec et de France.

♦♦♦♦♦♦♦♦

L'Association canadienne des gardes-malades et des assistantes dentaires dont le siège social se trouve en Alberta, a officiellement abrégé son nom qui est désormais l'Association canadienne des assistantes dentaires.

L'association a entrepris de modifier son nom il y a deux ans, mais c'est seulement récemment que le nouveau nom a été adopté de façon officielle.

La présidente de l'association, Barbara Peterson, a déclaré que ce changement s'est imposé "parce qu'il n'y a

pas de gardes-malades dentaires qui sont officiellement membres de l'association.

"La description des fonctions que l'association utilise comme guide ne s'applique plus aux gardes-malades dentaires, mais aux assistantes dentaires. Au Canada présentement, très peu de gardes-malades sont formées pour assister seulement les dentistes. Cependant, certaines travaillent en dentisterie restaurative," a-t-elle commenté.

Bien que le nom de l'association soit changé, ses officiers et sa structure restent les mêmes.

♦♦♦♦♦♦♦♦

Dernièrement, le Dr Joseph-Aubin Doiron, dentiste de North Rustico (Île-du-Prince-Édouard), sa ville natale, a reçu un diplôme honoraire à la collation des grades de l'Université de Moncton.

Le Dr Doiron a reçu le titre de Docteurs ès Sciences sociales. Ancien élève de l'Université de Montréal, il a déjà été président de l'Association dentaire de l'Île-du-Prince-Édouard et membre du Conseil d'administration de l'Association dentaire canadienne. En 1980, il était nommé Chevalier de Grâce de l'Ordre de Saint-Jean et Lieutenant-Gouverneur de l'Île-du-Prince-Édouard.

♦♦♦♦♦♦♦♦

La division de l'éducation permanente de l'Université de la Colombie-Britannique, de concert avec le réseau *Knowledge* (Connaissances), a présenté par satellite cinq émissions de deux heures chacune aux villes de toute la province.

À l'origine, on avait prévu plusieurs émissions pour l'automne 1981. À cause de difficultés techniques, ces émissions ont été reportées à janvier 1982. Deux des émissions s'adressaient aux dentistes et les trois autres, aux hygiénistes dentaires.

Suivant le Bulletin dentaire de la Colombie-Britannique, la communauté dentaire de la province a grandement apprécié ces émissions, les cliniciens y ayant participé étant de grand renom.

♦♦♦♦♦♦♦♦

Le Dr A.J. Camarda, détenteur d'un DDS et d'un MSc de l'Université McGill, est le premier récipiendaire du fellowship Henry M. Thornton, décerné en l'honneur du directeur général de Dentsply International. La cérémonie a eu lieu à Toronto.

Le Dr Camarda, qui prépare actuellement un doctorat en anatomie, à l'Université McGill, s'est vu remettre un chèque de 5 000 \$ du Fonds canadien pour l'enseignement dentaire.

Le fellowship, qui sera remis annuellement, a été créé en reconnaissance de l'intérêt que M. Thornton a manifesté et du soutien qu'il a apporté aux programmes du FCED visant à améliorer constamment la qualité des services dentaires offerts aux Canadiens.

Le Dr Camarda a obtenu un BSc de McGill en 1972, un DDS en 1976 et un MSc en chirurgie buccale en 1981.

♦♦♦♦♦♦♦♦

Dans le rapport annuel sur le régime d'assurance dentaire de la Saskatchewan pour 1980-1981, on note que le nombre des personnes qui y ont souscrit est élevé, comprenant 129 669 enfants âgés de quatre à quinze ans, soit 83,5 pour cent des enfants admissibles.

La majorité de ces enfants ont reçu des soins complets de la part de dentistes, de thérapeutes et d'assistants dentaires travaillant dans les 505 cliniques établis dans les diverses écoles primaires de la province. Des praticiens privés ont également administrés des soins d'urgence à des enfants participant au régime pour une somme s'élevant à 348 000\$.

Les dépenses totales du régime pour l'année 1980-1981 atteignent

10,9 millions de dollars, soit une moyenne de 77,40\$ par enfants inscrit.

♦♦♦♦♦♦♦♦

Pour la deuxième fois, le Dr Piscopo de Sault Ste-Marie (Ontario) s'est mérité le titre du "dentiste le plus rapide au Canada."

Le jour où s'est ouvert le Congrès de l'ADC et de l'ADO à Toronto, le Dr Piscopo était en lice avec 150 dentistes et auxiliaires dentaires pour la course de 12 kilomètres qui se tenait sur les îles de Toronto. Il a franchi le parcours en 39,25 minutes pour vaincre le Dr Art Shellnutt de Palmerston (Ontario) qui avait gagné la course en 1979 et en 1981.

En 1980, le Dr Piscopo avait couru dix kilomètres en 32,5 minutes et remporté sa première victoire sur le Dr Shellnutt. La même année, son frère et sa soeur étaient vainqueurs dans leurs catégories respectives.

Marié et père de deux enfants, le Dr Piscopo s'entraîne à la course depuis plusieurs années. Lorsqu'il se prépare pour une compétition, il court de six à huit milles par jour, six jours par semaine, pendant deux mois.

♦♦♦♦♦♦♦♦

L'ancien maire de Trenton (Ontario), le Dr Robert Patrick, a été choisi par acclamation comme premier président élu canadien de l'Académie de dentisterie générale, lors de la 30^e assemblée annuelle de cette organisation tenue du 10 au 14 juillet, à Boston. En 1983, il deviendra automatiquement le premier président canadien de l'ADG.

Diplômé de la Faculté de dentisterie de l'Université de Toronto, le Dr Patrick est praticien privé à Trenton.

En tant que membre du Conseil d'administration de l'ADG, il a déjà fait partie de ses comités du budget et des finances, a rempli consécutivement, à compter de 1977, deux mandats de deux ans chacun à titre de secrétaire et a été nommé vice-prési-

dent en 1981. Ancien directeur régional, il agissait comme président lors de l'assemblée annuelle de l'ADG tenue à Montréal en 1977.

♦♦♦♦♦♦♦♦

Dans le cadre de la *Great Silver Hunt* (la Grande Chasse à l'argent), on demande aux Torontois de faire fi des bienséances et de "cracher hardiment."

En effet, quiconque rejette les restes des obturations dans le lavabo du dentiste peut venir en aide aux enfants nécessiteux.

Trente bénévoles des Dames auxiliaires de l'Académie de dentisterie recueillent d'environ 250 cabinets dentaires de Toronto les résidus métalliques qui s'accumulent dans les gril-lages des lavabos.

Jusqu'à maintenant cette année, elles ont amassé 3 500\$ en argent et 800\$ en or.

"Avec le prix de l'or et de l'argent qui est à la baisse cette année," a déclaré Mme P.W. Markle, "nous sommes très contentes de la somme obtenue jusqu'à présent. Nous avons amassé 1 800 onces d'amalgame," a-t-elle précisé. Mme Markle est chargée de la cueillette de l'amalgame et de l'or.

Les recettes de cette chasse sont remises à la Faculté de dentisterie de l'Université de Toronto afin qu'on y donne des soins dentaires aux enfants nécessiteux.

Outre le sentiment de faire oeuvre de charité, les dentistes obtiennent un autre avantage en donnant leurs restes d'amalgame, puisqu'ils peuvent en déduire le coût équivalent de leurs revenus imposables.

En 1981, on a recueilli 1 308 onces d'amalgame, ce qui représentait 31 p. cent d'argent pur et une once d'or pour lesquels on a obtenu 8 000\$.

La *Great Silver Hunt* en est à sa vingtième année.

Temporo-Mandibular Joint Function and Dysfunction

George A. Jack and
Gunnar E. Carlsson (Ed.)

*C.V. Mosby Company,
St. Louis, Missouri,
\$49.25, 467 pages*

One scarcely knows where to begin when reviewing a publication such as this, so it might be as well to quote a couple of excerpts from the Preface. In it, the editors state, "This book... is designed for serious students of TMJ function and dysfunction," and again, "With the help of our contributors we have arrived at a comprehensive review of intelligently interpreted research in the field." The latter statement is an accurate assessment of the quality of the material in this book, and with this it is difficult to find fault.

The organization of the material is good, with chapters progressing in a logical sequence and as well, within chapters, the sequential arrangement of the material is excellent. A feature not seen in texts as a rule is the heading at the top of each double page. On the left hand page is given the chapter heading, and on the right is a reference to the sub-headings. The latter are in a large type with section titles in slightly smaller print, making it easier to locate the material for which one is looking. At the end of the chapters is a 'summary' or 'conclusion' followed by a rather long list of references. In fact there are approximately 1,300 altogether, which account for nearly 10 per cent of the volume. A scanning perusal tells me that there is a great deal of duplication which could have been avoided by using a different method of listing.

As the editors state, the first 13 chapters give a comprehensive review of the subject but perhaps not as complete as it might have been. Some aspects are treated in much greater detail than need be, while others are given minimal

coverage. For example, Chapter 12 on "Treatment of Mandibular Dysfunction", is 20 pages long while Chapter 2 on "Cartilage of the Mandibular Condyle" occupies more than 50 pages. In fairness, it should be pointed out that treatment is covered in varying degrees in other chapters.

The final chapter (14) is an excellent summation of the preceding works, containing pithy and pertinent comments by A.T. Storey, and one could suggest that this chapter be read as the first as well as the last.

The printing of the book is first-class with good, readable print on the highest grade glossy paper. The multitude of illustra-

tions were sharp and clear reproductions with the possible exception of the tomograms in Chapter 4, which is not intended as a criticism. The binding, at least of my copy, does not appear to be up to the usual standard that one commonly associates with book published by C.V. Mosby Company.

In conclusion, I feel I must observe that, while this book gives a comprehensive coverage of the subject and is an excellent source of references, its appeal is more likely to be to the members of dental specialties concerned with problems of the T.M. joint, than to the general dental practitioners.

*This book was reviewed by Ken Kerr,
Bedford, Nova Scotia.*

Rapid Maxillary Expansion

Donald J. Timms

*Quintessence Publishing Co.,
Inc., 1981
140 pages*

"There is no reason whatsoever why Rapid Maxillary Expansion, RME, should remain a fringe therapy nor why it should not be a part of mainstream orthodontics." This quote from the closing chapter of his book illustrates the author's purpose in this preparation. The text offers a comprehensive review of Rapid Maxillary Expansion and its application to dentistry today. Although of particular significance to the field of orthodontics, the ramifications of this relatively simple procedure are widespread and are directly linked to the disciplines of oral surgery, ENT and plastic surgery. An understanding of the role of RME in treating the pathological condition of mouth-breathing is of particular significance to the dentist in general practice.

Perhaps the low profile given to RME in much of the dental litera-

ture and, indeed, in most orthodontic curricula, is explained in one of the introductory chapters. The author speaks of "the great Expansion Debate" between the Rapid and Slow techniques which divided the profession into two groups. Later to come was a further division of thought with the "School of Extraction."

The author proceeds to uncover the mystery surrounding RME with consecutive chapters on Anatomy, The Appliance, Clinical Management, After RME, Medical Aspects, RME and Cleft Palates, RME and Surgical Interdependence, Hazards, Indications, Contraindications, and Radiographic Analysis. The topic of RME is covered thoroughly and the approach is logical and systematic. The general text is well written with superbly detailed illustrations.

A brief summary and conclusion complete the text and re-emphasize the inter-relationships between buccal crossbites, narrow maxillae and increased nasal resistance. The significant medical

(continued on page 522)

implications of RME will, in the author's opinion, necessitate the utilization of this technique into all progressive orthodontic practices.

RME and its positive effects on the dentition and general medical health are unlikely to be ques-

tioned. This text offers a very complete historical review of the literature and presents it in a logical format that is both clinically oriented and easy reading. It is a text that should be in every orthodontist's library and it provides

excellent resource material for several other associated health disciplines.

This book was reviewed by Dr. P.J. Porter, Charlottetown, P.E.I.

Clinical Oral Pediatrics

George E. White

Periodically a textbook appears which, in its attempt to be totally comprehensive, expounds too much information, leaving itself in that particular grey area between academic and clinical reference. As a general pedodontic text, "Clinical Oral Pediatrics" falls into this category. This book is not general enough to be on the average general practitioner's bookshelf, but is more likely suitable as a reference text in the library.

The divisions of the text (mesas) are reasonable, however, the sections on diseases and pathology are too heavily weighted. Many of

the diseases described and photographs produced were of an adult nature, hardly applicable to a pediatric text. References to the relationship of rhinology to pedodontics was just one example of a chapter which was comprehensively written but left this reader wondering if the information was more befitting a medical textbook rather than one on clinical children's dentistry.

Finally, on page 201, the clinical area of pedodontics is described beginning with the chapter on pain control, followed by the other clinical pedodontic areas familiar to us in numerous other texts. This area, I found to be enjoyable reading,

which was easy to comprehend.

In conclusion, I can fully appreciate the time and effort spent to develop this publication. However, from the beginning I found that too much attention was paid to the divisions of the text, rather than pertinent pedodontic information which could benefit the general practitioner.

This text is most applicable to the non-dental health professionals to help them realize the dental implications in the treatment of various diseases. As a clinical textbook, I do not recommend it for the dental professional.

This book was reviewed by Julian S. Geller, Pedodontist, Toronto.

DENTISTRY CLASS OF '32 — 50th REUNION



A group of graduates of the University of Toronto Faculty of Dentistry held a significant class reunion — their 50th — in conjunction with the CDA/ODA Convention in Toronto in May. Members of the Class of '32, now spread far and wide, throughout Canada and the United States, attended with their wives, and enjoyed social events and convention activities. Those in attendance posed (above) for the CDA camera. They are left to right: Drs. St. Clair Duncanson, London, Ont.; Wesley Ashton, Rochester, N.Y.; Ron Wylie, Toronto, (president of the class of '32); Jack Kreutzer, Toronto (secretary-treasurer of the Class of '32); Gerald Stafford, Santa Barbara, Calif.; Hal Shaver, St. Catharines, Ont.; Gordon Beesley, Moose Jaw, Sask.; Balfour Biggs, Flin Flon, Man.; G.W. "Bill" Willmott, Strathroy, Ont., and Harold Mitchell, Winnipeg, Man.

Obituaries

WICKETT, J. Maurice. Died April 19, 1982. Managing Director of S.S. White Dental Division for many years until his retirement in 1965.

CARVER, Lieut.-Col. Roderick Donald: June 27, 1982. He enrolled in the Canadian Army under the Dental Officer Training Plan in September, 1965, and graduated with a DDS from McGill University. In 1979, Lieut.-Col. Carver attended the University of Toronto for post-graduate training in dental public health. He served as a dental officer in Halifax, N.S., as a career manager in National Defence Headquarters, Ottawa, and was subsequently posted in CFB Cornwallis as base dental officer. He was also nominated to CDA'S Council on Health Care.

Standards for dental materials and devices

Derek W. Jones, BSc, PhD, FI Ceram.

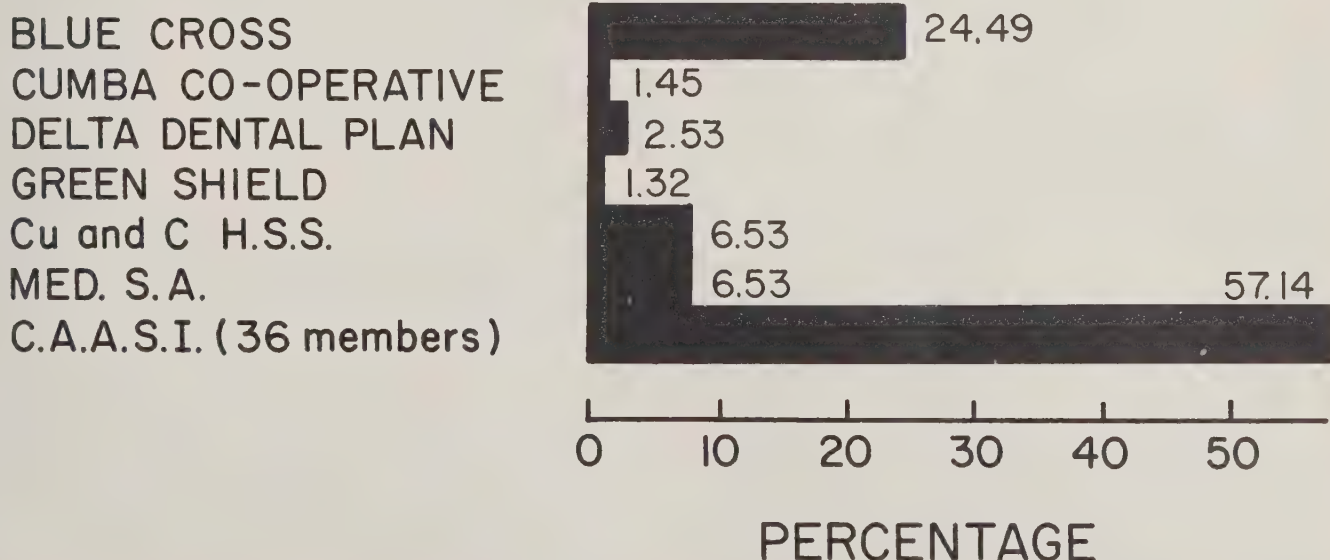
Dentistry is one of the few health professions in which the success or otherwise of most treatment procedures is very dependent upon the materials associated with the treatment. The standard and effectiveness of dental health care will thus be highly dependent upon the quality of materials and the manner in which they are used.

Dental costs in Canada are estimated at well over eight hundred million dollars a year. More than six million Canadians are now covered by dental insurance plans. The premiums for these dental plans are estimated to be well in excess of three hundred million dollars a year. The trend in third party payment will continue to increase with

time, many in the dental profession believe that we are nowhere near the saturation point.

The bar diagram Figure 1 illustrates the percentage membership of the various dental insurance plans. Blue Cross, a non-profit carrier, has just under 25 per cent of the business. However, the largest (percentage) is the 36 member group of Canadian Association of Accident and Sickness Insurers, with over 57 per cent of the market. In addition, we also have dental care on a limited basis in the six provinces in which dental plans operate and in which children and pensioners are the main recipients.

DENTAL PLANS



There is a high probability that *cost* and relative product characteristics such as quality (longevity) and safety (toxicity) of dental restorative materials will be looked at very carefully by both insurers and governments in the future. It is clearly in the best interests of patients, dentists, insurers and manufacturers to have a system to ensure minimum standards for the performance of dental materials.

The first standard specification for a dental material was for amalgam. This dates back to 1925, 56 years ago. We may ask the question what was the reason for the development of this specification in the U.S.A.? The reason was that Uncle Sam's army required a good quality amalgam at the right price, a material which met the then known clinical standard of performance at that time.

As the numbers of patients covered by third party payments increase, so will the interest taken by insurance companies in the quality, efficacy and safety of materials. We may well see in the future, that insurance companies which are running dental plans will insist that only materials meeting certain standards should be used. They may be interested in less expensive materials but *not* at the risk of a health hazard or a poor quality restoration. It is the standards for biological safety and performance criteria, especially longevity, which will, I am sure, become of much greater importance in the future. Thus the insurance companies will be following Uncle Sam's example for dental amalgam in order to ensure quality, and safety.

Table 1
NUMBER OF DENTAL STANDARDS
PUBLISHED

(Up to 1979)

ISO		19
AUSTRALIA	(SAA)	55
CANADA	(CSA)	4
FRANCE	(AFNOR)	26
GERMANY	(DIN)	66
JAPAN	(JISC)	63
SOUTH AFRICA	(SABS)	19
UNITED KINGDOM	(BSI)	30
USA	(ANSI)	28
	(ADA)	36

A large number of standards are in existence for dental materials. As shown in Table 1 most of these are national standards. At the moment we do have some 19 *International Standards*. Canada is just developing Dental Standards, largely by adopting or slightly modifying ISO Standards.

The International Standards Organization is the largest group in the world representing industrial and technical collaboration. Standards exist for a wide range of industrial and household products as well as medical and dental materials and devices. A large number of the National Standards writing organizations (some of which are listed in Table 2) participate in the development of international standards.

Table 2

NATIONAL STANDARDS ORGANIZATIONS

AUSTRALIA	(SAA)
BELGIUM	(IBN)
CANADA	(CSA)
FRANCE	(AFNOR)
GERMANY	(DIN)
JAPAN	(JISC)
NETHERLANDS	(NNI)
NEW ZEALAND	(SANZ)
SOUTH AFRICA	(SABS)
SWEDEN	(SIS)
UNITED KINGDOM	(BSI)
UNITED STATES	(ANSI)
USSR	(GOST)
E.E.C. — CEN	
(COMMITTEE EUROPEAN	
NORMALIZATION)	

The ISO Committee dealing with dentistry is the ISO/TC/106. The United Kingdom holds the Secretariat of this technical committee. This committee has eight working groups as shown in Table 3. Working Group 1 and 2 deal with dental materials.

Table 3
(ISO TC/106)
(DENTISTRY)

Committees of ISO Dealing With Dentistry

WORKING GROUP 1	Filling Materials
WORKING GROUP 2	Prosthetic Materials
WORKING GROUP 3	Terminology
WORKING GROUP 4	Instruments
WORKING GROUP 6	Equipment
WORKING GROUP 7	Tooth Brushes
WORKING GROUP 8	Dental Implants
WORKING GROUP 9	Dental Needles

The eight Working Groups are further broken down into 26 Task Groups. Working Group 1 (Table 4) dealing with filling materials, has nine such Task Groups. Canada holds the Secretariat of this important group. The Task Groups in Working Group 1 are involved in a wide range of activity covering all aspects of Operative Dentistry.

Table 4
Working Group 1

(SECRETARIAT CANADA)
List of Task Groups in Working Group 1

T.G. 1.	Zinc Oxide Eugenol Materials
T.G. 2.	Endodontic Materials
T.G. 3.	Polycarboxylate Cements
T.G. 4.	Testing Procedures
T.G. 5.	Pit and Fissure Sealants
T.G. 6.	Phosphate Bonded Cements
T.G. 7.	Alloy for Dental Amalgam
T.G. 8.	Glass Ionomer Cements
T.G. 9.	Resin Based Filling Materials
T.G. 10.	Cement Test Methods

Working Group 2 (Table 5) deals with prosthodontic materials. It has 11 active groups. The U.S.A. holds the Secretariat for this group. Canada does have representation on several of these groups such as investments, ceramics, impression materials, and soft lining materials for dentures. In general, once the standard has successfully passed the draft international standard (DIS) stage, the task group may well be disbanded. However, in some cases a task group may simply become inactive for a given period, until revision and review of the accepted standard becomes necessary.

Table 5
Working Group 2

(SECRETARIAT U.S.A.)
List of Task Groups in Working Group 2

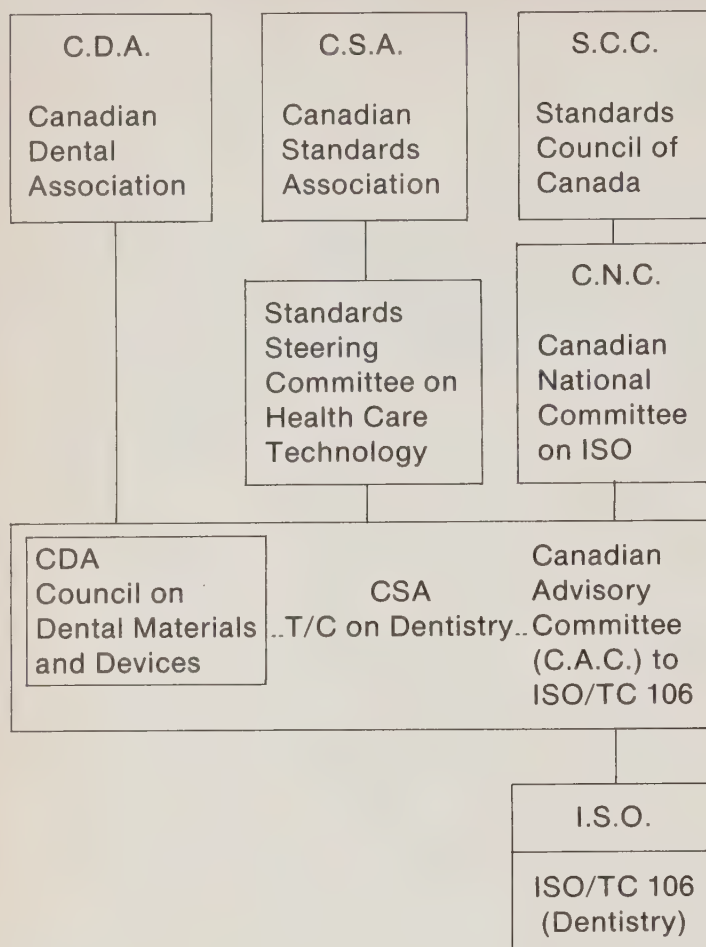
T.G. 1.	Ceramics (Porcelain to Metal Systems)
T.G. 2.	Base Metal Alloys
T.G. 3.	Casting Investments
T.G. 5.	Gypsum Products
T.G. 6.	Color Stability
T.G. 7.	Elastomeric Impression Materials
T.G. 8.	Gold Casting Alloys
T.G. 9.	Synthetic Resin Teeth
T.G. 10.	Denture Soft Lining Materials
T.G. 11.	Denture Base Material (Revision)
T.G. 12.	Corrosion Testing

CANADIAN PARTICIPATION IN ISO

The somewhat complicated organization of dental standards work in Canada operates in the following manner (see diagram Fig. 2). The federal government-funded Standards Council of Canada is the ISO member body for Canada. The general supervision and direction of Canadian participation in ISO is by the Canadian National Committee on ISO (CNC/ISO). Canadian participation in the technical work of ISO is by the Canadian Advisory Committee (CAC). The Canadian Advisory Committee is approved by, functions under the authority of, and reports to the CNC/ISO. The Canadian Advisory Committee (CAC) provides the expertise to ensure that Canadian interests are effectively represented.

The work on international and national standards is harmonized within practical limitations. The Canadian Standards Association (CSA) is the official standards-writing organization in Canada for dental standards. CSA is a unique national organization made up of business, government, labor, consumers and associations — all working together voluntarily in their common interest to develop national consensus standards.

The Canadian Dental Association has a 'Council on Dental Materials and Devices'. Most of the members of this Council are also members of the CSA and CAC/ISO Committees. The Canadian Dental Association nominates members to these committees and also recommends nominations for the chairmanship of CAC/ISO and CSA committees. The CSA Technical Committee on Dentistry is now in its fifth year of existence. The Committee comprises some 18 members having the following affiliations:



Relationship Between CDA, CSA and ISO
Figure 2

Health and Welfare Canada, Canadian Dental Association, Standards Council Canada, dental trade manufacturers, Canadian Dental Hygienists Association, Consumer Association of Canada and the Department of National Defence. The CSA is a non-profit independent voluntary organization engaged in developing standards and certifying to these standards.

Since Canada has little activity in the area of manufacturing of dental materials and devices,* it has been the prime goal to develop standards and ultimately a certification program to control importation and prevent inferior quality products reaching the consumer, that is the dental personnel and patients. The CSA Committee and the CDA Council on Dental Materials and Devices through the Standards Council of Canada are actively participating in the development of international standards. Participation at the international level is essential in order to integrate the activities of the CSA Committee with those of the ISO Committees.

The importance of standards for dental materials can be measured by the fact that some 95 per cent of the general

public in an advanced country like Canada suffer from dental caries and periodontal disease, the most common and universal health problem in developed countries. In Canada between four and 10 million amalgam restorations are placed in people's mouths each year. Contrary to general belief, all dental materials supplied by manufacturers are not necessarily safe to use. Some 1,000,000 Canadian patients are completely edentulous. The treatment of a significant proportion of these patients involves the management of traumatized oral mucosa and atrophic resorption of the residual alveolar bone. Resilient denture lining materials are used as essential adjuncts in the contemporary prosthodontic treatment of these conditions. Currently inadequate knowledge of the performance and requirements of such materials limits their effective utilization. The class of materials known collectively as denture soft lining materials is not well understood. Canada has been playing a leading role by instituting new international standards work for this class of materials. The federal Health Protection Branch has recently ordered the banning and withdrawal from the market of some denture soft lining materials in Canada (imported from the United States) due to the presence of cadmium as a coloring agent. The toxic heavy metal cadmium can cause serious kidney and lung disorders as well as damage to the central nervous system. Other such materials have been found to contain di-butyl phthalate, a plasticizer which is known to have a toxic effect.

Considerable concern has been expressed recently about the possible carcinogenicity of various phthalate esters widely used as plasticizers in very many medical and possibly some dental materials and devices. The most serious problem seems to be associated with a widely used plasticizer namely di(2-ethylhexyl) Phthalate or DEHP for short. A major concern is that DEHP is commonly used as a plasticizer in medical blood bags and flexible tubing.

Several thousand different dental materials and devices are imported into or manufactured in Canada. For example, 90 or more different alloys have been listed on the market for use as amalgam filling materials. In excess of 250 gold and base metal alloys are available for use as crowns, bridges, removable and non-removable dentures. Some of the base metal alloys contain high percentages (60 — 70 per cent) of nickel and even small amounts of beryllium in some cases. As a point of interest, nickel is not allowed in excess of one per cent in any dental alloys used in Sweden because of the possible toxic effect which it may have. Beryllium is, of course, highly toxic.

The recent rise in the past two years in the cost of some dental materials containing silver and gold has led to the increased availability of less expensive substitutes. There is a need to ensure that such alternative materials satisfy the minimum requirements of performance and safety.

The number of brands of so-called dental cements runs into several hundred. The various resin filling systems are

* Canadian production of dental supplies according to Statistics Canada (Industrial Commodity Code 882) was just over \$7 million in 1977, over \$1 million of this was exported to the U.S.

also similar in number. Some eight or nine different types of impression materials are currently used in dentistry and the number of different brands of impression materials runs well in excess of 200. A very large number of these and other materials and devices used in dentistry are available in Canada. A voluntary standards compliance program combined with the development of a list of acceptable materials is highly desirable.

It is important to ensure that materials and devices imported into or manufactured in Canada and used in the provision of dental health care meet a minimum standard and are safe to use. The rapid development in recent times of Materials Science has caused a bewildering array of materials to be added to the relatively few materials available in the past. There has been an enormous increase in both the number and type of new materials during the past five to 10 years.

Well established standards testing facilities do exist in the United Kingdom, Australia, United States and Scandinavia. The Scandinavian Institute for Dental Materials Research (NIOM) Oslo, was established in 1969 with the aim of testing dental materials available on the Scandinavian market to ensure that they are safe to use and that they fulfill the appropriate technological requirements. Each of the five participating countries pays into the annual budget of approximately \$1,000,000. The percentage paid by each country is calculated on the basis of its gross national product. A modified system along these lines based upon the existing university research establishments would seem to be most appropriate for Canada. At the moment there is no procedure for certifying dental materials which come onto the market in Canada.

The large variety of dental materials available on the market today with manufacturers constantly bringing forward claims for new and improved products provides a need for constant up-to-date evaluation. In some cases products may be marketed with inadequate or misleading instructions for their use. Thus, laboratory investigations are required to obtain information on the appropriate techniques in order to obtain optimum clinical results.

Dental materials are distributed worldwide by many large companies, principally from countries such as Germany, United States, United Kingdom and Japan. However, small countries from various parts of the world also produce dental products which may end up in Canada. The establishment of national and international standards will help to control and prevent importation of inferior products. However, there is a need once national standards are established to develop a capability to carry out the routine performance testing to ensure compliance with these standards. For example, a manufacturer's source of supply of raw materials may change which may result in a substandard product being produced. Development testing in a standards program as well as routine evaluations of products is an essential component of such a system.

While the vast majority of materials may not be regarded as dangerous, it is conceivable that some may be of inferior quality. Such restorations may require early replacement with the possibility of further loss of adjacent natural tissues and an accelerated deterioration of dental health. Such an occurrence would of course result in increased expenditure for the patient and/or the provincial dental plan.

According to a recent CDA estimate the total market for dental professional and laboratory supplies (1979 figures) is in excess of \$130 million. Imports from the U.S. of dental supplies (excluding equipment) have been estimated as being about \$70 million in Canadian funds.

PROGRESS ON IMPLEMENTATION OF
CANADIAN NATIONAL STANDARDS

The year 1979 saw the first two standards published by the Canadian Standards Association dealing with the technology used in dental care. A total of six standards have now been published as shown in Table 6.

Table 6	
Published CSA Standards in the Field of Dentistry	
CAN2-Z349.1 — 79 and Supp 1 — 81	Dental Terminology and Definitions/ Dentisterie — Terminologie et definitions
CAN3-Z349.2 — M79	Dental Burs and Cutters — Fitting Dimensions
CAN3-Z349.3 — M81	Dental Mercury
CAN3-Z349.4 — M80	Dental Inlay Casting Wax
CAN3-Z349.5 — M80	Dental Casting Gold Alloys
CAN3-Z349.9 — 80	Tooth Designation for Dental Purposes — Two- digit System

Currently, national standards are being developed by implementation or modification of existing ISO standards. Canada, through the CAC committee, is actively participating in the development of ISO standards. Six of the working groups of ISO Technical Committee (106) on Dentistry have Canadian representation and Canada holds the secretariat of one of the most important working groups (WG1) dealing with filling materials.

Canada has been playing a leading role in the ISO committees. A new work item suggested by Canada for Soft Resins used as linings for dentures has just been undertaken. The impetus for work in this area was based upon research being undertaken at the Dental School, Dalhousie University.

Table 7
ISO Current Projects

DIS 3630	Root canal instruments	DIS 6873	Gypsum products
DIS 3823	Cutting and grinding instruments	DP 6874	Pit and fissure sealants
DIS 3823/1	Steel and carbide burs	DP 6875	Dental patient chair
DIS 3823/2	Finishing burs	DP 6876	Root canal sealers
DIS 3823/6	Diamond instruments	DP 6877	Root canal obturating points
DIS 4104	Polycarboxylate cements	DP 7488	Mechanical dental amalgamators
DIS 4823	Elastomeric impression materials	DP 7489	Glass ionomer cement
DIS 4824	Porcelain teeth	DP 7490	Gold casting investments
DIS 6360/1-3	Rotary instruments — number coding system	DP 7491	Colour stability
DIS 6360/4	Rotary instruments — number coding system	DP 7492	Explorers
DIS 6871	Base metal casting alloys	DP 7493	Dental operator stool
DIS 6872	Porcelain powders	DP 7494	Dental units

(Note DIS = Draft International Standard, DP = Draft Proposal)

Task Group Developments

Corrosion testing	Low gold content casting alloys
Dental Implants	Mercury dispensers
Dental Needles for single use	Porcelain fused to metal materials
Dental Surgery lighting	Resilient lining materials
Hand instruments — classification and designation	Toothbrushes
Handpieces — low speed, medium speed, high speed	

The CSA is planning to complete national standards for Alginate impression materials and alloys used for amalgam fillings in 1982.

The Canadian Advisory Committee is participating in very many of the current ISO programs dealing with the various projects as listed in Table 7.

The establishment of these standards should ultimately result in improved dental health care delivery.

Implementation of ISO Dental Standards

A survey of the national implementation of ISO Dental Standards was carried out in 1978. The survey covered 19 ISO dental standards, with 16 countries responding.

The survey showed that in 53 cases ISO standards were used directly, 57 responses indicated that ISO standard had been adopted as the national standard without technical amendments, in 19 cases the standard was adopted with technical amendments. Some 39 responses indicated the intention to adopt the ISO standard as a national standard, in 12 instances the national standard was said to

be equivalent to the ISO standard. In seven instances it was stated that the ISO standard would not replace the existing national standard, and a similar number disapproved of the standard when circulated and would therefore not adopt it as a national standard. However, a large majority of manufacturing countries do employ directly or indirectly the ISO Dental Standards. These international standards facilitate international trade and increase the number of quality assured products available to an importing nation like Canada.

The general Canadian position has been that in most instances it would be the intent wherever possible to adopt the ISO standard as a national standard.

Dr. Jones is Professor and Head of the Division of Dental Biomaterials Science, Faculty of Dentistry, Dalhousie University, Halifax, Nova Scotia. He is also Chairman of the Canadian Advisory Committee, ISO/TC 106, and of the CSA Technical Committee on Dentistry. He has a seat on the Secretariat of ISO/TC/106 WG1, Filling Materials.

The fitness and suitability of dental materials for clinical use

Derek W. Jones, BSc, PhD, FI Ceram.

STANDARDS FOR DENTAL MATERIALS

Canada has now embarked upon a program of developing national standards for dental materials. Considerable responsibility rests upon the dentist in the choice of treatment and materials in any given situation. The availability in Canada of national standards for selected materials will make some of these decisions a little easier.

The objective of a dental standard specification should be to lay down adequate and acceptable requirements based upon clinical and other practical experience to ensure that materials will perform satisfactorily in use and do not present a hazard to the patient or operator. A standard specification is not intended as a means to rank materials in order of quality and performance. However, for some materials it may be necessary to grade them, but in most cases the specification should simply aim to provide a measure of the acceptable level necessary to meet the performance requirements. The preparation and publication of (ISO) international standard specifications which are agreed to by member countries (by vote) representing the major manufacturers and users of dental materials, should avoid or minimize the existence of conflicting national standard specifications which may act as a hindrance or barrier to international trade. The requirements included should be comprehensive with regard to 'hazards' to the patient which may reasonably be expected to occur.

For Whom are the standard specifications written?

Standard specifications are primarily written to protect the consumer, but who is the consumer? The dentist and other dental personnel, the patient, or all three groups, can be regarded as the consumers of dental materials. However, the development of standard specifications are valuable and important to five separate groups 1) Dentists and other Dental Personnel; 2) Patients; 3) Dental Insurance Plan Companies; 4) Manufacturers, and 5) Distributors.

For the dentist, patient and insurance companies, a safety and performance standard is of obvious value. However, it is also true that manufacturers and distributors will find a performance standard covering their products to be very valuable.

With the development of world trade in dental products the control of the quality of imported items is a high priority both for the dental profession and the general public. Many countries operate certification or approval schemes for dental materials (Canada has a voluntary compliance program in the planning stage), in such cases it is desirable that the ISO standard specifications should be drafted in such a way as to avoid ambiguous statements and thus render them more suitable for certification purposes. Standard specifications for dental materials and devices should not be written in legal terminology. However, clarity of presentation may avoid the need for amendment of an ISO standard in respect of its national adoption.

The Dilemma

A major problem to be faced in the writing of standard specifications is the choice which has to be made between a standard specification which specifies by DESCRIPTION or one that specifies by PERFORMANCE. This dilemma is addressed in the ISO Directives for presentation of international standards. It is pointed out in the ISO document that a formulation by description (i.e., naming specific materials or components) may block technical developments. This was a factor which had to be taken into consideration during an ISO TC 106 Working Group debate in Paris (1979) involving the draft specification for alloys used for amalgam. A specification limited to those alloys with a high silver content was suggested, however, this was considered to be unduly restrictive. Test methods and performance requirements should be the primary means of assessing a material's suitability; *the specification of certain compositional limits cannot, by itself, be used as a means of assessing suitability*. The alternative of specifying by performance alone can lead in some cases to complicated testing procedures of long duration and high cost. The ISO Directives suggest that a good product standard will in fact be "*a judicious blend of description and performance characteristics*."

The ISO document also points out the danger that can result from avoiding the naming of constituents and relying solely on performance requirements. Whilst this allows freedom to choose a wider range of constituents and may encourage innovative technical developments such as high copper alloys for amalgam, we do have to be absolutely certain that the important and relevant performance characteristics (dependent on composition) have not been overlooked. For example, elements known to be toxic can be excluded by a compositional specification statement. The original ADA standard for alloys used for amalgam and other national standards for alloys used for amalgam at one time set an upper limit of six per cent by weight for copper content. Such specifications in theory, would have limited and discouraged the Canadian development of the present high copper alloys.

Clinical Relevance

We need to be absolutely sure about the relevance of the performance characteristics selected for evaluation. They should truly reflect the performance required of the material. The tests may not in all cases simulate exactly the clinical usage, but will evaluate *those properties* of the material which are *relevant to clinical usage*. It may be inadequate to specify a compressive strength test. A tensile test may be more relevant or perhaps a creep test or even a dynamic creep test at 37°C.

The first stage in any standard specification writing exercise for dental materials should be to set down clearly the performance characteristics which are deemed absolutely essential to successful handling and performance. In the case of restorative materials the placement, safety and

longevity of the material must be considered, whilst in the case of materials used for impressions, models, dies and investments the handling, setting and dimensional change characteristics are of vital importance. The performance requirements should be *recognized* as being *set at an adequate level of acceptance*.

It should be recognized that, for most dental materials the clinical performance criterion for the mode of clinical failure are difficult, if not impossible to establish. This is especially true of the two most commonly used restorative materials. For example, we do not know the mechanism of failure of dental amalgam. After over 160 years of use and more research activity than any other material in dentistry, we still do not know the full reasons for its success or failure. Does amalgam fail as a result of creep?, corrosion?, corrosion/fatigue or some other mechanism? The mechanism of failure of resin based filling materials is also regarded as being a mystery. No correlation has been established between clinical failure and laboratory measurements of hardness, strength or abrasion. There is a need for more research to compare the laboratory measured values with the performance of materials in the clinical situation, this will ultimately lead to a better understanding of the relative importance of these properties. Research is currently throwing some light on the correlation between clinical performance of amalgam and certain laboratory measurements.

In order to obtain maximum benefit from any test procedure, the properties determined must only be those that are required for service conditions. When assessing a material for a particular purpose, we have to know the conditions under which that material will be used and try to reproduce those conditions when testing the materials in the laboratory. Tests should be developed based upon existing knowledge of the clinical requirements.

The laboratory test methods selected should be based upon knowledge obtained at three stages:

- 1) Existing clinical and practical knowledge based upon evaluations of the conditions under which a material is used clinically or in the dental laboratory, such as the force exerted upon the material, or the temperature to which the material is subjected. Clinical knowledge may be required of the physical/chemical conditions of the tissues or fluids that the materials will contact. The selected methods must refer to specific clinical or dental laboratory criteria which are relevant for the type of materials under test.
- 2) Laboratory testing:- in order to measure the clinical and practical properties of materials, the test system used should reproduce conditions as similar to the clinical situation as possible or as deemed desirable. In principle, excessively expensive equipment is not specified for the test methods.
- 3) Prior to the acceptance of the selected equipment and test procedures, such systems have to be evaluated by at least four or five laboratories using "round-

robin" testing to ensure reproducibility and reliability of test data.

In general the handling characteristics of materials involving properties such as the rate of change of viscosity or flow and the setting reaction temperature dependence are easily identified as important, although they are difficult to measure easily and accurately by means of simple test equipment.

Instructions for Use

Most dental materials are supplied in two parts which require mixing — or alternately the one component is required to be mixed with water. Thus the performance of all dental materials is very dependent upon the method of use. This is especially true of some of the filling materials such as amalgam. This places a very strong responsibility upon the manufacturer to *provide adequate and precise instructions* for the handling and use of the material in order to obtain the 'optimum' performance. Many materials currently on the market do not carry adequate instructions for use.

It follows therefore that any standard specification should require the manufacturer to *provide adequate and precise instructions for use*. This is now regarded as one of the *most important sections* in most standard specifications being developed for dental materials. New standards are now aiming to incorporate a date of manufacture and/or date of packaging and/or expiration date. This date is to be given in the sequence year, month, day, using six digits.

CONCLUSIONS

There is a need for continual refinement of performance standard specifications for evaluating dental materials, even if the established present day materials are reasonably satisfactory. The old argument that the market place will look after the problems is not adequate.

A standard specification that emphasizes performance will enable any improvements or developments in new materials, however marginal, to be recognized. If a particular material is removed from the market, a performance specification will enable the user to select another material having similar properties to fit his technique or requirements.

However, a specification *should not set unrealistic performance criteria* which will cause materials to be developed with characteristics which are *not relevant to the clinical performance* requirements. We should remember that dentistry is one of the few health professions in which *the success or otherwise of the majority of treatment procedures undertaken are very largely dependent upon the materials associated with treatment and the manner in which these materials are manipulated*. Due to lack of adequate clinical performance data any standard specification developed for dental materials is bound to involve

some compromise and will in general be a blend of both description and performance characteristics.

Status of ISO Standard Specifications

An ISO standard specification has no legal status as such, the procedure being that national standards organizations adopt the ISO standard specification as their national standard specification, or agree to use them directly. Thus the ISO standard specification would have the status according to national standard specifications in each respective member country, which may involve a certification program. ISO member countries involved in the development of specifications are under some obligation to adopt the ISO standard specification, (when published) as their national standard.

Review of Standards

Those involved in the writing of standard specifications can have some of the weight removed from their shoulders when they realize that standard specifications are not a set of rules like the Ten Commandments written for all time. They are written on paper not stone and should be revised and updated to take into account new developments in techniques and materials. The ISO has a mandate to review all standard specifications at least every five years.

This paper is based upon a tentative guideline document developed by Derek Jones specifically to aid the convenors and members of task groups engaged in the writing of standards for filling materials.

The author wishes to acknowledge the very helpful suggestions and comments received in the development of this paper.

Dr. Jones is Professor and Head of the Division of Dental Biomaterials Science, Faculty of Dentistry, Dalhousie University, Halifax, N.S. He is chairman of the Canadian Advisory Committee ISO/TC 106, and also of the CSA Technical Committee on Dentistry. He serves on the Secretariat of ISO/TC 106 WG1 Filling Materials.

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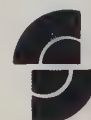
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A materialistic look at dental research in Canada

Derek W. Jones, BSc, PhD, FI Ceram.

Why do we do research? Research is, or should be, conducted for one reason only: to discover that which is unknown. In pursuing the quest of the unknown by research, the faculty members of our dental schools improve their knowledge and understanding of their subject area. This will result in an improvement in their teaching capabilities as well as stimulating other faculty members and students. The faculties of dentistry have a moral obligation to pursue research in order to work towards the elimination of dental disease and to improve the level and quality of dental treatment received by patients.

It is a sad reflection that many of our dental faculty members across Canada do not engage in research. There may be several explanations for this. Colin Dawes, Chairman of the MRC Dental Sciences Committee, has pointed out (J. Canad. Dent. Ass., Vol. 43 #3, March 1982) that dental clinicians tend to have much heavier teaching responsibilities than their counterparts in medicine. The latest figures quoted indicated that over 35 per cent of medical faculty members hold research grants while in dentistry it is less than 10 per cent. Many potential dental researchers believe that they suffer from three basic problems:

- 1) severe competition from medical researchers;
- 2) regional disparity;
- 3) heavy concentration of funding in selected topic areas.

It is true that dentistry receives less than two per cent of the grants in aid funding from MRC. The other 98 per cent or so goes to medical research. However, since there is no pre-determined limit to the amount available to dental researchers, it is up to dentistry to improve their grantsmanship to enable them to take a larger share of the funding.

It is difficult to find encouragement for those dental faculty members who are not at present funded from MRC. However, it is important to recognize that MRC Operating Grants are awarded, following intensive peer assessment. University administrations should also recog-

nize that these funds are only provided to *assist* in defraying the running costs of basic, applied, developmental or clinical research carried out in the health science com-

TABLE I
Dental MRC Research Funding*
Distribution by University
1980/81

University	Number of Projects	Amount	Per cent of Dental *MRC Funds	Per cent of Total MRC Grant in Aid Funds**
Alberta	6	\$ 122,595	12.17	0.22
British Columbia	6	\$ 204,647	20.32	0.37
Dalhousie	1	\$ 20,500	2.04	0.04
Laval	—	—	—	—
Manitoba	7	\$ 222,456	22.09	0.40
McGill	—	—	—	—
Montreal	—	—	—	—
Saskatchewan	—	—	—	—
Toronto	11	\$ 436,922	43.38	0.79
Western Ontario	—	—	—	—
Total	31	\$1,007,120	100.00	1.82

Average funds per project = \$32,487.74

NOTE: Alberta
British Columbia = 97.96
Manitoba
Toronto

**Total MRC Grants in Aid and Major Equipment Funds 1980/81 = \$55,321,000

* Dental Grants in Aid and Major Equipment funds only

Data compiled from MRC Report of the President 1980/81

TABLE II

Dental MRC Research Funding*
Distribution by University
1979/80

University	Number of Projects	Amount	Percent of Dental *MRC Funds	Percent of Total MRC Grant in Aid Funds**
Alberta	6	\$ 142,586	17.56	0.31
British Columbia	5	\$ 165,232	20.34	0.36
Dalhousie	1	\$ 18,000	2.22	0.04
Laval	—	—	—	—
Manitoba	8	\$ 241,669	29.75	0.53
McGill	1	\$ 22,000	2.71	0.05
Montreal	—	—	—	—
Saskatchewan	—	—	—	—
Toronto	8	\$ 222,736	27.42	0.49
Western Ontario	—	—	—	—
Total	29	\$812,223	100.00	1.79

Average funds per project = \$28,000

NOTE: Alberta
British Columbia = 95%
Manitoba
Toronto

**Total MRC Grants in Aid Funds 1979/80 = \$45,370,000

* Dental Grants in Aid funds only (excluding Major Equipment, Special Units, etc)

Data compiled from the MRC Report of the President 1979/80

TABLE III

Dental MRC Research Funding*
Distribution by University
1978/79

University	Number of Projects	Amount	Per cent of Dental *MRC Funds	Per cent of Total MRC Grant in Aid Funds**
Alberta	4	\$ 118,837	19.3	0.29
British Columbia	5	\$ 129,886	21.1	0.32
Dalhousie	1	\$ 5,200	0.85	0.01
Laval	—	—	—	—
Manitoba	9	\$ 233,697	38.0	0.58
McGill	—	—	—	—
Montreal	—	—	—	—
Saskatchewan	—	—	—	—
Toronto	5	\$ 127,526	20.73	0.31
Western Ontario	—	—	—	—
Total	24	\$615,146	—	1.51

Average funds per project = \$25,631

NOTE: Alberta
British Columbia = 99.15
Manitoba
Toronto

**Total MRC Grants in Aid Funds 1978/79 = \$40,629,000

* Dental Grants in Aid funds only (excluding Major Equipment, Special Units, etc)

Data compiled from MRC Report of the President 1978/77

plexes of Canadian Universities. In other words, the University dental schools themselves should be paying more than just lip service to dental research. This is indeed a difficult problem to face at this time with provincial and federal fiscal restraint in an era of austerity, which place limitations on public expenditure. However, it is true to say that many faculties of dentistry have not placed sufficient emphasis in the past upon the importance of research. However, it should be noted that each of the dental schools receives a General Research Grant from MRC designed to stimulate and encourage research at each of the ten schools.

It is a fact that there is a heavy concentration of research funding in Canada in selected topic areas such as Periodontology, Oral Microbiology and Neuro-physiology. Greater collaboration amongst scientists of different disciplines could help to provide a wider spectrum of dental research activity.

FUNDING DOESN'T REFLECT PROBLEM

Almost every member of the Canadian public suffers from universal dental disease. Dental costs in Canada are estimated at well over eight hundred million dollars a year. However, the research expenditure in this area of health care does not reflect the size of the problem. In 1980-81, some 55.3 million dollars in grants in aid were distributed by MRC (excluding MRC Special Groups and support for research fellows, etc.). A mere 1.8 per cent of this was spent on dental grants in aid of research (see Table 1).

The whole of dentistry received just over a million dollars in grants in aid from MRC funding in 1980-81. The balance went to medical research. The situation in 1979-80 was a little worse — of the 45.3 million MRC grants in aid 1.79 per cent was awarded to support dental projects, in 1978/79 the dental share was down to 1.51 per cent. How-

TABLE IV
Dental MRC Research Funding*
Distribution by University
1977/78

University	Number of Projects	Amount	Per cent of Dental *MRC Funds	Per cent of Total MRC Grant in Aid Funds**
Alberta	4	\$ 100,480	18.1	0.30
British Columbia	5	\$ 136,139	24.6	0.40
Dalhousie	—	—	—	—
Laval	—	—	—	—
Manitoba	7	\$ 151,545	27.4	0.45
McGill	—	—	—	—
Montreal	—	—	—	—
Saskatchewan	—	—	—	—
Toronto	7	\$ 165,455	29.9	0.49
Western Ontario	—	—	—	—
Total	23	\$553,619	—	1.63

Average funds per project = \$24,070

NOTE: Alberta
British Columbia = 100%
Manitoba
Toronto

* Dental Grants in Aid funds only (excluding Major Equipment, Special Units, etc)

**Total MRC Grants in Aid Funds 1977/78 = \$33,991,000
Data compiled from MRC Report of the President 1977/78

NOTE: The \$553,619 total represents 19.7 per cent of the total dental research funding (\$2,811,610) as listed in Table II.

TABLE V
Dental MRC Research Funding*
Distribution by University
Combined Data for Years 1977 — 1981

University	Number of Projects**	Amount	Per cent of Dental MRC Funds*	Per cent of Total MRC Grant in Aid Funds***
Alberta	20	\$ 484,498	16.21	0.28
British Columbia	21	\$ 635,904	21.28	0.36
Dalhousie	3	\$ 43,700	1.46	0.02
Laval	—	—	—	—
Manitoba	31	\$ 849,367	28.43	0.48
McGill	1	\$ 22,000	—	0.01
Montreal	—	—	—	—
Saskatchewan	—	—	—	—
Toronto	31	\$ 952,639	31.88	0.54
Western Ontario	—	—	—	—
TOTAL	107	\$ 2,988,113	—	1.70

Average funds per project = 27,926.29

NOTE: Alberta
British Columbia = 97.80%
Manitoba
Toronto

* Total amount of Dental Grants in Aid Funds 1977 — 1981 (plus major equipment for 1980/81) = \$2,988,113. Data compiled from MRC Report of the President 1977/78 — 1978/79 — 1979/80 — and 1980/81.

** This represents the cumulative number of projects as listed in the years 1977/78 — 1978/79 — 1979/80 and 1980/81. Some projects may be listed two or three times if the grant is renewed.

***Total MRC Grant in Aid Funding (including major equipment grant for 1980/81) 1977 — 1981 = 175.3 Million

ever, the disparity becomes increasingly obvious when looked at on a geographical basis (Tables I to V). Dental researchers in many regions receive little or no MRC funding. Perhaps the most disturbing aspect is that 95 per cent of all MRC grants in aid funding are concentrated within 40 per cent of our faculties of dentistry. Between 1977 and 1981 the combined MRC funding for these four dental faculties was as follows: Alberta 16 per cent, British Columbia 21 per cent, Manitoba 28 per cent, and Toronto 32 per cent. Over the period of 1977 to 1981 the dental share of Grants in Aid funding from MRC was 1.7 per cent.

In addition to MRC funding, monies are also made available from the National Health Research and Development Program. Provincial support is provided from such sources as the Alberta Heritage Fund and the On-

tario Ministry of Health Research Fund. With the exception of Dalhousie, all nine of the dental faculties have access to Provincial funds for research.

The total funding for dental research in Canada for 1980-81 was over \$3 million and between 50 and 60 per cent of this was funded by the Medical Research Council.

The total dental research funding for 1979 from all sources was just over \$2 million. Of this some 64 per cent was from the MRC grants in aid program and some 16 per cent from provincial sources. The distribution of these funds by funding agency is shown in Table VI. The data is compiled from the 1981 survey of research funding as reported by ACFD/AFDC Research Committee. Table VIII shows the distribution of the 1979 dental research funds by University. Toronto received about one third of the total funding. The average funds per project were

TABLE VI

Total Dental Research Funding '1979'
From All Sources, Distribution by Funding Agency

	\$	%
* Federal Funding	\$1,435,927	68.5
**Provincial Funding	345,232	16.5
Private Industry	61,643	3
Charitable Foundations	60,242	2.9
U.S. Agencies	84,300	4.0
Other	109,039	5.2
TOTAL	\$2,096,383	

* Federal Funding: MRC 63.9%
 NRC 1.1%
 NSERC 2.39%
 Health & Welfare 1.73%

**Provincial Funding: Ontario Ministry of Health \$179,110
 Others \$166,122

This data has been compiled from the 1981 Survey of Research Funding as reported by the ACFD/AFDC Research Committee. The data may not be complete. There may be discrepancies resulting from different methods used in reporting the data such as cut off dates, etc. The source of some funding could not be clearly designated hence the 5.2 per cent in the 'other' category.

The total does not include the MRC Group for Periodontal Physiology at Toronto (\$531,627).

\$28,329. In 1978 the total dental research funding from all sources reported was \$2.8 million (Table VIII). The University of Toronto received some 46 per cent of all dental research funding (excluding special MRC Group). It

TABLE VIII

DENTAL RESEARCH FUNDING 1978

University	Per cent
Toronto	46.0*
Montreal	11.5
Western Ontario	10.0
British Columbia	9.5
Manitoba	8.3
Alberta	7.0
McGill	4.4
Dalhousie	2.3
Laval	1.1
Saskatchewan	0.0

Total research funds (\$2,811,610) including Ontario Provincial funding and Alberta Heritage Trust, etc.

*Excluding MRC Group

NOTE: Only 19.7 per cent of these funds (\$553,619) were from Federal MRC Operating Grants (1977/78)

TABLE VII

Total Dental Research Funding '1979'
From all Sources, Distribution by University

University	Number of Projects	Amount	Per cent
Alberta	8	175,900	8.39
British Columbia	16	523,695	24.98
Dalhousie	4	67,861	3.24
Laval	3	29,379	1.40
Manitoba	17	497,776	23.74
McGill	4	105,742	5.04
Montreal	—	—	—
Saskatchewan	—	—	—
Toronto	22	696,030	33.20
Western Ontario	—	—	—
TOTAL	74	2,096,393	—

Total Number of Researchers Listed 92

Average Funds/Project = \$28,329

Data compiled from the 1981 Survey of Dental Research Funding as reported by the ACFD/AFDC Research Committee. This data may not be complete.

The total does not include the MRC Group for Periodontal Physiology at Toronto (\$531,627).

At least 16.5 per cent of this comes from provincial funding as shown in Table VI. However, the provincial contribution may be higher than this due to the difficulty in designating the source of some funding.

should be noted that it would appear that less than 20 per cent of the total funds for dental research from all sources in 1977/78 came from the Federal MRC Dental Grants in Aid program (Table IV). However, it is important to recognize that the data may have discrepancies which result from different methods used in reporting the cut-off dates.

NEW FIVE-YEAR PLAN

The federal government announced in March 1981 that it had made a decision to increase the funds available to the Medical Research Council for 1981-82. Some \$98.4 million was allocated to MRC for support of health science research in Canada. This decision was greeted with enthusiasm by Canadian scientists in the health professional schools. This is part of a new five-year plan submitted to the government by the Medical Research Council. The aims of this five-year plan are to make increased utilization of the expertise of the many trained health science research science investigators and, in addition, to give encouragement to areas of research not yet fully developed.

TABLE IX
IADR/AADR — Number of Abstracts

Year	1982	1981	1980	1979	1978	1977	1976	Total
All Subjects	1,555	1,383	1,543	1,364	1,193	1,390	1,080	9,508
*Selected Dental Material Topic Papers	195	151	195	155	113	158	100	1,067
**Total Dental Materials Papers	271	242	258	199	151	245	126	1,492
Total Dental Materials Papers as % of Total for all Subjects	17.4	17.5	16.7	14.6	12.7	17.6	11.7	15.7

* Selected topics as given in Table X and XI

**Total number of papers for all dental materials topics

TABLE X
Total Numbers of Abstracts for Selected Categories of Dental Materials

IADR/AADR 1976 — 1982	
Amalgam	329
Base Alloys	63
Cements	77
Ceramics	130
Composites	319
Denture Resins	39
Gold Alloys/Solders	61
Impression Materials	49
Others	425
TOTAL PAPERS ALL SUBJECTS 9,508	TOTAL PAPERS ON DENTAL MATERIALS 1,492

MRC would like to see increased collaborative work among scientists of different disciplines. It is also recognized that there is an urgent need to update research equipment and facilities and a need to provide extra pairs of hands to undertake the technical procedures.

For the fiscal year 1982-83 the federal government has provided a 12.7 per cent increase, thereby bringing the Medical Research Council's yearly funding for grants to \$110.9 million.

In spite of this it is recognized that there is a need for supplemental funding immediately for MRC. Dental and medical researchers are both urgently in need of extra

funding. Materials, equipment and personnel costs have risen dramatically in recent times which has eroded the already modest funding provided for dental research.

In the last competition for MRC grants in aid, only one third of the grant applications were funded and very many that were funded had to be cut back in terms of technical support or equipment requests. Dental and medical research in Canada faces a somewhat bleak and desperate future unless some form of supplementary funding is provided by the federal government.

Dentistry is one of the few health professions in which the success or otherwise of most treatment procedures is dependent upon the materials* and techniques associated with treatment. It would seem to follow therefore that the standard and effectiveness of dental health care will thus be highly dependent upon the quality of the materials and the manner in which they are used. Faculties of dentistry should therefore encourage and provide time for their members to engage in dental materials research, especially in clinical research.

In the past, MRC research funds devoted to dental biomaterials research have been extremely small, in 1977/78 0.1 per cent of the total MRC grants in aid funds were devoted to Dental Biomaterials Science topics whilst in the years 1978/79 it was 0.07 per cent, 1979/80 — 0.04 per cent; 1980/81 indicated an improvement with 0.24 per cent. These funds as a percentage of the dental grants in aid awards for the four year periods were as follows: 1977/78 — 6.4 per cent; 1978/79 — 4.5 per cent; 1979/80 — 2 per cent; 1980/81 — 13.2 per cent.

The large increase in 1980/81 is influenced by a grant which relates to surgical implants and is not strictly a dental project. It can be seen that typically dental materials research receives only a small proportion of MRC research funding. Dentistry itself gets only a very small slice of the research funds cake (less than 2 per cent of MRC grants in aid) and dental materials research receives only a few crumbs.

NEED FOR MATERIALS RESEARCH

There is clearly a greater need today for information on the biocompatibility of the materials which we are placing into people's mouths. Contrary to general belief, all materials supplied by manufacturers are not necessarily 'safe' to use. The recent rapid rise in the cost of some dental materials containing silver and gold has led to a search for less expensive substitutes. There is an urgent need to ensure that such alternative materials satisfy the minimum requirements of performance and safety. Increased emphasis is being placed on biocompatibility of

*NOTE: [According to a recent CDA estimate the total market for dental professional and laboratory supplies (1979) figures) is in excess of \$130 million. Imports from the U.S. of dental supplies (excluding equipment) have been estimated as being about \$70 million in Canadian funds.]

materials at both national and international levels. The use of alloys containing nickel and beryllium has been questioned; concern about the use of various phalate esters as plasticizers in resin systems has been expressed. One even hears concern about the use of amalgam, with mercury being the prime cause for concern. The use of radioactive porcelain materials is another topic which has attracted attention. Considerable responsibility rests upon the dentist for the procedures used and the materials that are placed into patients mouths.

The term acceptable risk is often used to describe those risks which we take which are actually present but which to date have not been demonstrated to exist by scientific studies. Further research should be conducted to eliminate as many of the so-called acceptable risk situations as possible.

The earliest legislation related to biocompatibility of materials is thought to be the Act passed in 1560 in England during the reign of Henry VIII. The Act empowered the appointment of inspectors by the Royal College of Physicians to enable some form of quality control and inspection of apothecary wares, drugs and stuffs. It has taken us some 420 years to address the problem in dentistry. A document on the Biological Evaluation of Dental Materials has been developed (1979) by the FDI group #5 and has been submitted to the ISO for consideration as an International Standards Organization Technical Report.

This document represents the results of many years of work by ISO/FDI co-workers from many different countries. The working group is aware that the report represents the first preliminary stage in the establishment of standardized biological test procedures. The document represents the current state of the art in biocompatibility testing. It is recognized that this document will require periodic updating as knowledge and techniques are refined. The FDI Committee have made the point in the introduction to the document that it is hoped that more reliable and less expensive tests will become available as more experience is gained with the test methods. In the present form, the document allows considerable flexibility for the selection of test methods for the assessment of the various types of dental materials. It is hoped that more definitive guidance for the selection of tests will be possible when more experience has been gained by research into the use of different test methods.

Some indication of the level of research into dental materials can be gained by looking at the number of such topics presented at the IADR/AADR meetings each year. In the seven years between 1976 and 1981 a total of 9,508 papers were presented, of these 1,492 were dealing with dental materials. Thus almost 16 per cent of the papers were devoted to dental materials during this period. A summary of the total number of IADR papers and the

number of papers dealing with dental materials for the years 1976-1982 is given in Table IX. A number of topic areas have been selected to give an indication of the number of papers in various categories of research in dental materials over this period of time. This is shown in Table X. As would be expected the most commonly researched materials were amalgam with a total of 329 papers and composites with a total of 319.

Table XI shows the percentage distribution of dental materials related abstracts by selected topic area for each of the years 1976-1982. As can be seen over 40 per cent of the abstracts dealt with the two most commonly used restorative materials.

TABLE XI
IADR/AADR Abstracts(%)
Distribution of dental materials related abstracts
by selected topic area for the years 1976 — 1982

	1982	1981	1980	1979	1978	1977	1976	All Years
Amalgam	19	18	25	28	23	24	14	22
Composite	24	21	17	24	20	19	28	21
Cement	6	4	7	3	5	5	6	5
Ceramic and Alloy Systems	10	6	13	7	8	3	15	9
Base Alloy	5	4	2	5	7	5	2	4
Gold Alloy/Solder	3	3	6	7	3	3	5	4
Denture Resin	3	4	1	1	4	3	4	3
Impression Material	2	2	3	5	5	3	5	3
Others	28	38	24	22	25	36	21	28

Since the success of most dental treatment procedures is dependent upon the materials and techniques associated with the treatment it would seem reasonable to suggest that dental researchers and faculties of dentistry in Canada should place a greater emphasis on this topic area, and thereby ensure that a higher percentage of the research dollars in Canada are spent upon dental biomaterials related research.

Dr. Jones is Professor and Head of the Division of Dental Biomaterials Science, Faculty of Dentistry, Dalhousie University, Halifax, Nova Scotia.

Announcements

CANADA

August/août

Second International Congress on Hospital Dental Practice, Four Seasons Hotel, Toronto, Ontario, August 26-29, 1982. Contact: Dr. C.O. Munro, Programme Chairman, 2nd International Congress on Hospital Dental Practice, 124 Edward Street, Toronto, Ont. M5G 1G6.

September/septembre

The Canadian Symposium on Drug Diversion, sponsored by the Canadian Pharmaceutical Association, Solicitor General of Canada, Department of Justice Canada, and Health & Welfare Canada, Canadian Government Conference Centre, Rideau Street, Ottawa, Ontario, September 15-16, 1982. Contact: Canadian Pharmaceutical Association, 1815 Alta Vista Drive, Ottawa, Ontario K1G 3Y6. Phone: (613) 523-7877.

The 42nd Annual Northern Ontario Dental Association Convention, Senator Hotel, Timmins, Ontario, September 17-19, 1982. Contact: Dr. Ray Kurys, 137 Pine South, Timmins, Ontario P4N 2K3. Phone: (705) 267-3900.

October/octobre

Western Society of Teachers of Oral Pathology Annual Meeting, Faculty of Dentistry, University of British Columbia, Vancouver, B.C., October 13-15, 1982. Contact: Dr. R.W. Priddy, Department of Oral Medicine, Faculty of Dentistry, University of British Columbia, 2199 Wesbrook Mall, Vancouver, B.C. V6T 1Z7.

Annual Convention of the Newfoundland Dental Association, Gander Hotel, Gander, Newfoundland, October 14-16, 1982.

Alberta Academy of Periodontics Continuing Education presents "Periodontal Considerations in a Dental Practice" by Professor S. Ramfjord, University of Michigan, Calgary, Alberta, October 15-16, 1982. Contact: Dr. Malcolm P. Miller, Suite 302, 2303 4th Street S.W., Calgary, Alberta T2S 2S7. Phone: (403) 265-5033.

Canadian Association of Oral and Maxillofacial Surgeons 1982 Scientific Session: Pre-Intra and Post-Operative Management of the Major and Maxillofacial Surgery Patient, Four Seasons Hotel, Toronto, Ontario, October 15-17, 1982.

Contact: Dr. David M. Slavkin, Co-chairman, 1920 Weston Rd., Suite 209, Weston, Ont. M9N 1W4.

The Fourth Biennial Symposium on Occlusal Studies, Hyatt Regency Hotel, Vancouver, British Columbia, October 17-20, 1982. Contact: The Society for Occlusal Studies, 1729 South Douglass Road, Anaheim, California 92806, U.S.A. or The Director, Division of Continuing Dental Education, 2199 Wesbrook Mall, U.B.C., Vancouver, B.C. V6T 1Z7.

The Annual Meeting of the Canadian Academy of Endodontics, Four Seasons Hotel, Montreal, Quebec, October 22-24, 1982. Contact: Dr. Herb Borsuk, 4141 Sherbrooke St. W., Suite 515 Westmount, Que. H3Z 1B8. Phone: (514) 933-8424.

December/Décembre

The Toronto Academy of Dentistry Annual Winter Clinic, Royal York Hotel, Toronto, Ontario, December 6, 1982. Contact: Academy of Dentistry, 234 St. George St., Toronto, Ont. M5R 2P2. Phone: (416) 967-5649. **Please note change of day and date from previous years.**

Conference on Medical Device Technology in the 80's, Harbour Castle Hotel, Toronto, Ontario, December 6-8, 1982. Contact: Canadian Association of Manufacturers of Medical Devices, 480 Garyray Drive, Weston, Ont. M9L 1P8. Phone: (416) 745-9210.

International

September/septembre

The 13th International Cancer Congress, Seattle, Washington, September 8-15, 1982. Contact: Congress Office, Suite 1800, Fourth and Blanchard Building, Seattle, WA 98121, U.S.A. Phone: (206) 621-9440.

The seminar "Tomorrow's Dentistry Today", sponsored by the Alpha Omega Foundation and the Friends of the Hebrew University, Grand Hyatt Hotel, New York City, U.S.A., September 11-12, 1982. Contact: Dr. Seymour Evans, Chairman, Alpha Omega Conference, 225 Westchester Ave., Port Chester, N.Y. 10573, or call Tricia Collins (212) 840-5840.

Asociacion Argentina de Ortopedia Funcional de Los Maxilares, 25th Anniversary, Buenos Aires, Argentina, September 19-23, 1982. Contact: Dr. S.A. Gandolfo, Secretario, Asociacion Argentina de Ortopedia Funcional de Los Maxilares, Buenos Aires, Argentina.

The 5th Annual Greater Niagara Frontier Dental Meeting, presented by the Dental Alumni Association of the State University of New York at Buffalo, Buffalo Convention Center, Buffalo, New York, September 23-25, 1982. Contact: Dental Alumni Association, State University of New York at Buffalo, 194 Farber Hall, Buffalo, New York 14214. Phone: (716) 831-2836.

'Orthodontics for the General Practitioner', a dental seminar sponsored by UBC's Faculty of Dentistry and the School of Dentistry, Oregon Health Sciences University, London, England, September-Continuing Ed. in the Health Sciences, #105-2194 Health Sciences Mall, UBC, Vancouver, B.C. V6T 1W5.

October/octobre

Third International Dental Congress on Modern Pain Control, Tokyo, Japan, October 3-6, 1982. Contact: Third International Dental Congress on Modern Pain Control, c/o Japan Convention Services Inc., Nippon Press Center Building, 2-1, Uchisaiwai-cho 2-chome, Chiyoda-ku, Tokyo 100, Japan.

The 68th Annual Meeting of the American Academy of Periodontology, Disneyland Hotel, Anaheim, California, October 6-9, 1982. Contact: American Academy of Periodontology, 211 East Chicago Avenue, Room 924, Chicago, Illinois 60611.

The First International Seminar on Implantology, Lariboisière Hospital, Paris, France, October 7-9, 1982, just prior to the FDI Congress in Vienna. Contact: Mrs. Noelle Jouhaud, 5 avenue de l'Opéra, 75001 Paris, France; or Dr. G. Bastien, 2472 Bayview Avenue, Willowdale, Ontario M2L 1A7, (416) 444-7744.

Le premier séminaire international d'implantologie aura lieu à l'hôpital Lariboisière (Paris, France) du 7 au 9 octobre 1982, juste avant le Congrès de la FDI à Vienne. Agent: Mme Noëlle Jouhaud, 5, avenue de l'Opéra, 75001 Paris, France, ou le Dr G. Bastien, 2472 Bayview Avenue, Willowdale, Ontario M2L 1A7 (tél.: 416 444 7744).

The American Dental Association's President's Conference on Dentist/Patient Relations and Managing Patients' Fears, Anxieties and Pain, ADA Headquarters, October 8-9, 1982. Contact: Dr. William Ayer, Bureau of Economic and Behavioral Research, ADA, 211 East Chicago Avenue, Chicago, Illinois.

Fédération Dentaire Internationale, 70th Annual World Dental Congress, Vienna, Austria, October 11-16, 1982.

Second International Symposium on Overdentures, San Antonio, Texas, October 15-17, 1982. Contact: Dr. K.D. Rudd,

Announcements

Associate Dean for Continuing Dental Education, University of Texas Health Science Center at San Antonio School, 7703 Floyd Curl Dr., San Antonio, Texas 78284. Phone (512) 691-7451.

November/novembre

Consensus Development Conference on Clinical Applications of Biomaterials, National Institutes of Health, Bethesda, Maryland, November 1-3, 1982. Contact: John W. Boretos, Building 13, Room 3W13, National Institutes of Health, Bethesda, Maryland 20205.

The American Academy of Implant Dentistry's 31st Annual Educational program IMPLANT UPDATE, Las Vegas, Nevada, November 1-6, 1982. Contact: AAID Central Office, 515 Washington Street, P.O. Box 2, Abington, Massachusetts 02351. Phone: (617) 878-7990.

"A Colloquium on Dental History, Writing for the Scientific Literature, and Bioethics" is the subject at the Annual Meeting of the American Academy of the History of Dentistry, Las Vegas Hilton International Hotel, Las Vegas, Nevada, November 5, 1982. Contact: University of Southern California School of Dentistry, P.O. Box 77951, 925 West 34th Street, Los Angeles, California 90007.

The 123rd Annual Session of the American Dental Association, Las Vegas, Nevada, November 6-9, 1982. Contact: ADA Council on International Relations, 211 East Chicago Avenue, Chicago, Illinois 60611. Phone: (312) 440-2726.

International Congress of the Association Dentaire Francaise, Palais des Congres, Paris, France, November 23-27, 1982. Examining the two main aspects of professional activity — Preventive Dentistry & Therapeutic Care. Simultaneous interpretation in English, French and German will be available during the main scheduled events. Contact: Dr. Guy Roberts, Secretary-General, 92 avenue de Wagram, 75017 Paris, France.

British Dental Association — Metropolitan Branch, First International Prosthodontic Symposium, Royal Lancaster Hotel, London, England, November 25-27, 1982. Contact: Dr. M. Seymour, Programme Co-ordinator, 22 Devonshire Place, London W1N 1PD, England.

December/Décembre

The Sri Lanka Dental Association's 50th Anniversary, Colombo, December 4-6, 1982. Contact: Dr. L.S.W. Dassanayake, Chairman, Organising Committee, Sri Lanka Dental Association, Professional Centre, 275/5, Baudhaloka Mawartha, Colombo 7, Sri Lanka.

The Barbados Dental Association's 2nd Convention for The Caribbean Atlantic Regional Dental Association in conjunction with the Institute for Further Education, Barbados, W.I., December 5-8, 1982. Contact: Dr. Bernard Tuckman, 720 North Park Ave., Easton, Connecticut 06612, U.S.A.

The 37th Indian Dental Conference, Bangalore, India, December 26-29, 1982. Contact: Dr. Pradip Jayna, Hon. General Secretary, M-75, Connaught Circus, New Delhi-110001, India.

1983+

The 13th Annual Miami Winter Meeting, sponsored by the East Coast District Dental Society (FL), Fontainebleau Hilton, Miami Beach, Florida, January 20-22, 1983. Contact: East Coast District Dental Society, 420 South Dixie Highway, 2-E, Coral Gables, Florida 33146. Phone: (305) 667-3647.

The "Kieferorthopadische Fortbildungstagung in Kitzbuhel" meeting, Kitzbuhel/Tyrol, Austria, January 30- February 5, 1983. Contact: Medizinische Ausstellungen- und Werbegesellschaft, Maria Rodler & Co., A-1014 Wien I, Freyung 6, Postfach 155.

9th Congress of Dentistry for Children, Wenworth Melbourne Hotel, Australia, February 21-24, 1983. Contact: Dr. Roger K. Hall, Royal Children's Hospital, Parkville, 3052, Victoria, Australia.

International Conference of Dental Surgeons, Rawalpindi/Islamabad, Pakistan, March 22-26, 1983. Contact: Chairman, Organizing Committee, Armed Forces Institute of Dentistry, Rawalpindi, Pakistan.

First International Symposium on Periodontics and Restorative Dentistry, Sheraton-Boston Hotel, Boston, Massachusetts, April 28-30, 1983. Contact: Kim Vander Steen, Quintessence Publishing Co., Inc., 8 S. Michigan Avenue, Suite 2301, Chicago, Illinois 60603. Phone: (312) 782-3221.

The 1983 Annual Convention of Les Journées Dentaires du Québec, Montréal, Québec, May 28-June 1, 1983. Contact: Dr. Morton Lang, Executive Director, Les Journées Dentaires du Québec, 3565 rue Berri, Suite 200, Montréal, Québec H2L 4G3. Phone: (514) 842-9112.

The Canadian Association of Oral and Maxillofacial Surgeons Meeting, Vancouver, British Columbia, June 3-6, 1983. Contact: Dr. Brian M. Abrams, Secretary, Canadian Association of Oral & Maxillofacial Surgeons, 410 - 11012 MacLeod St.S., Calgary, Alta. T2J 6A5.

The 5th Canadian Congress of Dentistry for Children, Westin Hotel, Calgary, Alberta, July 1-3, 1983. Contact: Dr. Jack A. Derbyshire, 496-115-9th Avenue S.E.,

Calgary, Alberta T2G 0P5. Phone: (403) 262-7000.

Meeting of the Canadian Academy of Prosthodontics, Vancouver, B.C., September 20-22, 1983. Contact: Dr. B.M. Jackson, 22 Water Street S., Kitchener, Ontario N2G 4K4.

Canadian Dental Association, 1983 National Convention, Vancouver, British Columbia, September 25-28, 1983.

Fédération Dentaire Internationale, 71st Annual World Dental Congress, Tokyo, Japan, November 14-20, 1983. Contact: Japan Dental Association, 1-20, Kudan-Kita 4-chome, Chiyoda-ku, Tokyo 102, Japan.

Canadian Dental Association, 1984 National Convention, Montreal, Quebec, April 8-12, 1984. Contact: Dr. Morton Lang, O.D.Q., 3565 Berri St., Suite 200, Montreal, Que. H2L 4G3. Phone: (514) 842-9112.

The 1984 Annual Convention of Les Journées Dentaires du Québec, Montréal, Québec, April 8-12, 1984. The convention will be held jointly with the Canadian Dental Association convention.

Canadian Dental Association, 1985 National Convention, Ottawa, Ontario, September 29-October 2, 1985.

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BRITISH COLUMBIA — Excellent opportunity in general group practice located on Central Vancouver Island, in outstanding fishing, skiing, recreation area. Reply to CDA Box Number 2121.

UNIVERSITY OF BRITISH COLUMBIA — Oral and Maxillofacial Surgery. Applications are invited for a full-time position in the Department of Oral and Maxillofacial Surgery, University of British Columbia, Vancouver, Canada. Candidates should have completed a fully accredited training program and be eligible to sit the specialty examination required by the College of Dental Surgeons of B.C. Duties include participation in the didactic and clinical teaching of minor oral surgery to the undergraduate students and potential involvement in any future graduate training program which may evolve. Salary and rank are negotiable according to qualification and experience. Operating room privileges are available. The appointment will be at the Assistant/Associate Professor level. The application, together with curriculum vitae, should be sent to: Dr. A.E. Swanson, Head, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, The University of British Columbia, 2199 Wesbrook Mall, Vancouver, B.C., Canada V6T 1Z7

BRITISH COLUMBIA — Prince George. New medical/dental clinic is being constructed in an essentially unopposed area of Prince George, B.C. Participation could be available on a lease or equity basis. For further information contact: Joe Gormley, 508-1488 4th Avenue, Prince George, B.C. V2L 4Y2. Phone: (604) 562-5860.

BRITISH COLUMBIA — Victoria. Locum required for a modern preventive practice. Starting October, 1982 for four months. Please contact: Dr. Olga Dudek, 205-1595 McKenzie Avenue, Victoria, B.C. V8N 4A1. Phone: (604) 721-2221.

ALBERTA — Oral surgeon certified to practise in Alberta required for a busy practice. Object partnership. Please submit qualifications and curriculum vitae and recent photo to CDA Box Number 2111.

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UNIVERSITY OF SASKATCHEWAN, College of Dentistry — Saskatoon, Saskatchewan, Canada. Effective July 1, 1983 a vacancy for a full-time faculty member will exist in the Department of Diagnosis and Oral Radiology, College of Dentistry, University of Saskatchewan. Applicants should have postgraduate training in, or related to, Diagnosis, Oral Radiology, and Oral Medicine, with a major emphasis on Oral Radiology, and should be eligible for licensure with the College of Dental Surgeons of Saskatchewan. Responsibilities include teaching undergraduate courses related to Diagnosis, Oral Radiology and Oral Medicine, supervision of related clinical activities, and co-operating with other faculty when screening patients for

College Teaching Clinics. Research facilities are available and the adjacent University Hospital Dental Residency Program may provide useful resources. Maxillofacial radiology equipment presently installed in the department includes cephalometric, panoramic and tomographic units. Consulting and Practice Privileges to a maximum of two half days per week are permitted, either on or off base. An Intramural Practice Unit is provided for faculty who wish to utilize on base facilities. Salary and rank commensurate with qualifications and experience. Interested applicants should send curriculum vitae and related documentation with at least three names for reference purposes to: Dr. E.R. Ambrose, Dean, College of Dentistry, University of Saskatchewan, Saskatoon, Saskatchewan S7N 0W0.

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THE UNIVERSITY OF WESTERN ONTARIO — Oral Pathology Graduate Program. Applications are now being invited for a position starting July 1st, 1983 in U.W.O.'s graduate program in pathology with training in oral pathology. This is a three-year program that leads to the M.Sc. degree. A stipend is available. Application forms and information may be obtained from Dr. D.G. Gardner, Chairman, Division of Oral Pathology, The University of Western Ontario, London, Canada N6A 5C1. Completed applications should be submitted by September 1st, 1982.

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The Department of Northern Saskatchewan's Children's Dental Program requires two dentists for La Ronge, situated 150 miles north of Prince Albert. The program includes treatment, prevention, and education, and is aimed toward treating northern children aged 16 years and under. The program is a team approach utilizing dentists, dental therapists, and dental assistants. The successful applicants will, in consultation with the senior dentist, have input into program and policy development. In their areas, they will interact with other health programs, supervise the dental therapists and assistants, and be responsible for work quality, as well as performing clinical work. Extensive travel by vehicle and small aircraft is required.

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For information contact: Maureen Mason, Department of Northern Saskatchewan, Dental Program Administrative Officer, Box 5000, La Ronge, Saskatchewan, S0J 1L0

Forward application forms and/or resumes to the Saskatchewan Public Service Commission. Please quote position, department, competition and file number on all applications and/or inquiries.



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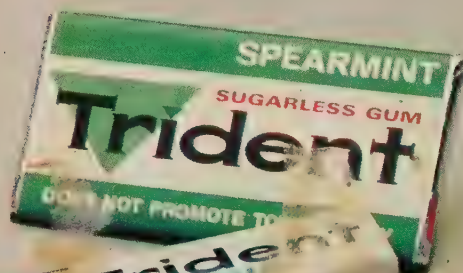


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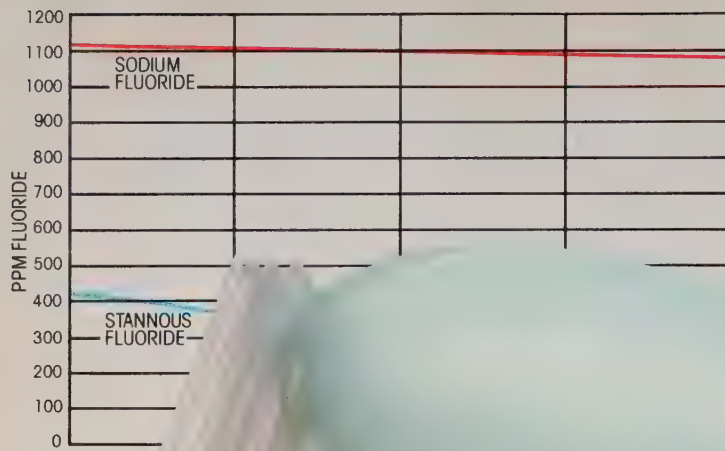
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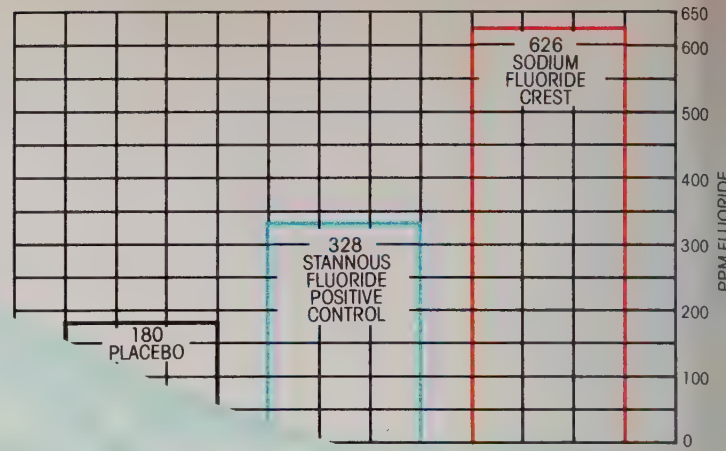
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Dr. Robert Sexton**Editorial****547** Dr. Douglas Yeo believes it is worthwhile to look back to where dentistry has been, where it is today and where it should be going tomorrow, in the field of preventive and community dentistry.**Letters****553** **Dr. Lightman's editorial**
Dr. G.W. Myers, Executive Director of ACFD, found Dr. Lightman's editorial on geriatric treatment, in the June edition of the CDA Journal, "extremely stimulating."**A misprint?**

A University of Alberta dental faculty professor finds a CDA Journal anthropological reference "astounding."

Thanks for item

Marvin Kay, MD, an anesthetist, thanks the CDA Journal for mention of an important milestone in his career.

In the News**555** **New Québec Government-QDSA dental plan agreement**
QDSA members, at a meeting on July 17, "all agreed to the package."**ODQ at 'end of the road'**

The ODQ campaign to change Québec's policy, handing over traditional dental roles to hygienists and assistants, has come to a standstill, according to an ODQ official.

556 **Fluoride shortage: supplies dwindle** — A slowdown in the production of phosphate fertilizers has created a shortage of HFS, a by-product used to fluoridate community water supplies.**557** **Royal College Convocation**
The Royal College of Dentists of Canada awarded 13 Fellowships, and conferred Memberships on 93 specialists.**561** **What to do if you are sued — CDSPI** — This article advises dentists of the correct procedure to follow if a malpractice suit should arise in their career.**568** **Dental equipment relief project in the Caribbean** — The past-president of a small Ontario town's Lions Club is devoting all his time to collecting and transporting hospital and dental equipment for underdeveloped countries in the Caribbean.**570** **Agreement reached in Newfoundland cutbacks**

A compromise agreement was reached between the provincial government and the NDA to reduce the cost of the Children's Dental Plan.

Dental faculty associate dean is not a dentist

The only non-dentist in such a post in Canada feels it's an advantage because he can be an "objective outsider."

572 **Federal government wants to control health care programs**
A Dalhousie professor says the federal government regards a national program as important "for national unity."**574** **Briefly**
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A new collection of articles on the subject of "Community Dentistry and Preventive Dentistry" is listed.**Publications****589** **Regional Anaesthesia of the Oral Cavity**
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Éditorial

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- 554** Le Dr Gérard de Montigny reprend un dentiste de Toronto pour sa critique de la couverture du numéro de mars.

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- 576** **Le Centre de documentation**
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- 580** **Nouvelle entente entre Québec et l'ACDQ**

À la fin de juillet, une entente a été conclue entre le gouvernement du Québec et l'ACDQ.

Vains efforts de l'ODQ pour renverser une décision du gouvernement

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- 581** **Pénurie de fluorure: une crise de l'industrie des fertilisants chimiques dont il dérive**

Un ralentissement dans la production des fertilisants au phosphate crée une pénurie de fluorure.

- 582** **Réunion du CRCDC**

Le Collège royal des chirurgiens dentistes du Canada a conféré le titre de membre à 13 personnes et à 93 spécialistes.

- 583** **Que faire si on vous poursuit en justice? — CDSPI**

Voici quelques conseils pratiques lorsqu'un dentiste est poursuivi pour faute professionnelle.

- 585** **Entente conclue à Terre-Neuve**

Une entente a été conclue entre le gouvernement de Terre-Neuve et l'Association dentaire de la province touchant le régime d'assurance dentaire pour les enfants.

- 586** **Un regard étranger sur la dentisterie**

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- 587** **En bref**

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- 593** **Données sur l'état dentaire d'un groupe d'adolescents de Charlesbourg** — Diane Lachapelle-Harvey.

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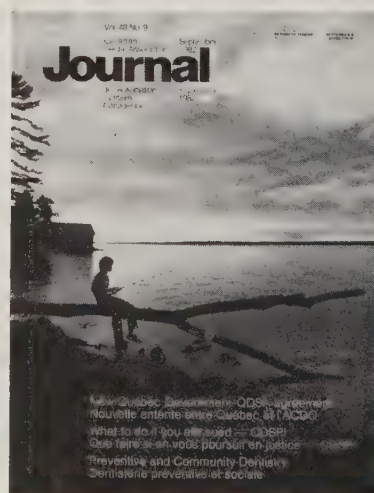
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en justice?—CDSPI

Dentisterie
préventive et
sociale

PREVENTIVE AND COMMUNITY DENTISTRY

When considering the subject of preventive and community dentistry, it might be worthwhile to look back to see where we've been in dentistry in order to understand better where we are today and where we should probably be going tomorrow. The practice of dentistry has come through three distinct stages and now finds itself in a fourth and most important stage.

The earliest stage of practice was symptom-centred practice, where patients came to "dentists" for the relief of pain and the "dentist" did his best to oblige. That period lasted from early history to the mid-nineteenth century, when dentistry was provided by barbers, itinerants, self-appointed dentists or apprentices. Next came disease-centred practice where dentists received more formal education but concentrated on the treatment of disease. Many practitioners treated only tooth defects with no thought for the patient and much of this treatment resulted in Hunter's famous definition of gold inlays and crowns as "mausoleums of gold over a mass of sepsis." This period saw the evolution of the focal infection theory which had a great influence on treatment methods. With the realization that patients were attached to teeth, we entered the third stage, patient-centred practice, where the patient was treated as a whole individual and the concept of total patient care was adopted. In recent years, we have realized that each patient is an individual integer of society and community-centred practice is slowly emerging.

As dentists, we have constantly strived to improve our own services to our own patients and gradually, through social conscience, education, and changing times, we have realized we also have responsibilities for services to the population as a whole. In the mid-fifties, the shortage of dental manpower caused public concern and brought about public involvement. The Universal Declaration of Human Rights of the United Nations made health care a "right" and governments, organized labour, employee groups, private and voluntary organizations began to make arrangements to purchase medical and dental care on a group basis. Health departments formed dental divisions and dentists trained in public health began to involve both communities and practising dentists in dental health promotional programs. Dental organizations formed dental health committees, dedicated to improvement of

dental health in their own geographical areas. In 1961, the Royal Commission on Health Services held hearings across this country and individuals and groups from every community were given the opportunity to express their views concerning health care.

The Canadian Dental Association and provincial dental organizations participated actively in presentations before the Royal Commission on Health Services, presenting plans designed to improve the dental health of Canadians on a community and national basis. The theme of community involvement and public education, prevention and research has continually been stressed as measures which should take priority over straight treatment programs.

At about the same time, because of the high incidence and prevalence of dental disease, and because of the influence of people like Robert Barkley, members of the profession embraced preventive dentistry as a philosophy of practice. Individual dentists and their auxiliaries began to apply all known preventive procedures in their offices and at the same time participated actively in community programs such as the three-year-old birthday card program in British Columbia, promotion of community water fluoridation, and Dental Health Week campaigns. Establishment of departments of preventive, community or social dentistry in dental schools, consumerism, human rights movements, peer review, and our codes of ethics have all served to focus our attention on our community and social responsibilities.

Dental health surveys of children across the country are showing a remarkable reduction in the prevalence of dental disease and are providing proof that preventive dentistry and organized community efforts really do work. Attention is now being focussed on the dental needs of adult and geriatric patients. The assessment of need and development of programs to meet these needs is one of the challenges facing us in 1982. As dentists, we should be prepared to see that this challenge is successfully met in our own communities, not as isolated providers of clinical treatment, but as members of a comprehensive community-oriented health team.

*Douglas J. Yeo, DDS, MPH,
Acting Dean, Faculty of Dentistry,
The University of British Columbia,
Vancouver.*

DENTISTERIE PRÉVENTIVE ET SOCIALE

Lorsqu'on pense à la dentisterie préventive et sociale, il peut être utile de se tourner vers la dentisterie du passé pour comprendre où nous en sommes aujourd'hui et quelle direction nous devons prendre pour l'avenir.

L'histoire de la dentisterie comprend trois époques distinctes. Nous en sommes maintenant à la quatrième et à la plus importante de toutes.

La première époque a été celle des symptômes. Le patient rendait visite au dentiste quand il éprouvait des douleurs et celui-ci faisait de son mieux pour l'en soulager. Cette époque a été la plus longue, puisqu'elle remonte au début de l'histoire et dure jusqu'au milieu du XIX^e siècle. La médecine dentaire était alors le fait des barbiers, des colporteurs, des dentistes improvisés ou des apprentis. Suivit l'époque des maladies pendant laquelle le dentiste recevait une formation plus officielle, mais s'occupait surtout de traiter la maladie. Plusieurs praticiens soignaient seulement les dents atteintes, sans se préoccuper du patient, d'où la fameuse définition des incrustations et des couronnes en or donnée par Hunter: "des mausolées d'or recouvrant une masse d'infection." Ce fut durant cette période que fut élaborée la théorie de l'infection focale qui a eu une grande influence sur les méthodes de traitement. À la troisième époque, le dentiste se rend compte que "le patient est attaché à la dent," si l'on peut s'exprimer ainsi. Autrement dit, il traite le patient et non plus seulement la dent. C'est le concept du traitement global: la personne est un tout unifié, non un ensemble de parties distinctes. Au cours des dernières années, on a compris que le patient, tout en accusant une personnalité propre, fait également partie d'un groupe et, lentement, est apparu le concept de la dentisterie sociale.

En tant que dentistes, nous avons sans cesse tenté d'améliorer la qualité de nos services et, progressivement, à mesure que la société a pris conscience de ses besoins, que l'éducation s'est répandue et que les temps ont changé, nous nous sommes rendu compte qu'il nous appartenait également de rendre des services à la population en général. Au milieu des années 1950, la pénurie de main-d'oeuvre dentaire a attiré l'attention du public et suscité son intervention. Avec la Déclaration des droits de la personne, les Nations Unies faisaient des soins de santé un "droit." Par la suite, les gouvernements, les syndicats ainsi que les sociétés privées et bénévoles ont commencé à prendre des dispositions pour acheter des soins médicaux et dentaires sur une base collective. Les ministères de la Santé ont créé des divisions dentaires et les dentistes formés en santé publique ont commencé à intéresser tant les

groupes sociaux que les dentistes exerçants aux programmes visant à promouvoir la santé dentaire. Les organisations dentaires ont établi des comités de santé dentaire dont l'objectif est justement d'améliorer la santé dentaire dans leurs régions respectives. En 1961, la Commission royale sur les services de santé a tenu des séances à travers le pays, donnant aux particuliers et aux groupes sociaux la chance de dire ce qu'ils attendaient dans ce domaine.

L'Association dentaire canadienne et les organisations dentaires provinciales ont apporté leur collaboration à cette commission, proposant des régimes d'assurance conçus de manière à améliorer la santé dentaire des Canadiens tant dans les différentes communautés que dans le pays tout entier. Sans cesse, on a soutenu que la participation du public, son éducation, la prévention et la recherche sont des moyens qui devraient avoir le pas sur les simples programmes de traitement.

Vers la même époque, à cause du taux élevé des maladies dentaires et grâce à des personnes influentes comme Robert Barkley, les membres de la profession ont accepté la dentisterie préventive comme la seule vraie raison d'être de la médecine dentaire. Les praticiens et leurs auxiliaires ont commencé à adopter des méthodes de prévention dans leurs cabinets et, simultanément, à participer à divers programmes sociaux comme l'envoi de cartes d'anniversaire aux enfants de trois ans en Colombie-Britannique, la promotion de la fluoruration de l'eau et les campagnes de santé dentaire. La création de divisions de dentisterie préventive ou sociale dans les écoles dentaires, le consumérisme, les mouvements en faveur des droits de la personne, la révision professionnelle et nos codes d'éthique ont contribué à concentrer notre attention sur nos groupes sociaux et sur les responsabilités que nous avons envers eux.

Suivant les enquêtes sur la santé dentaire, les enfants du pays entier ont un taux remarquablement moins élevé de maladies dentaires. C'est la preuve que la dentisterie préventive et que des efforts sociaux concertés portent réellement fruit. Présentement, l'attention est surtout dirigée vers les besoins dentaires des adultes et des vieillards. L'évaluation de ces besoins et la création de programmes pour y répondre constituent l'un des défis actuels. Comme dentistes, nous devons être prêts à le relever avec succès dans nos communautés respectives, non en tant que dispensateurs isolés de soins, mais en tant que membres d'une équipe soucieuse de la santé du public en général.

*Douglas J. Yeo, DDS et MPH,
doyen suppléant de la Faculté de dentisterie
à l'Université de la Colombie-Britannique.*

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Stimulating editorial

I found Dr. Lightman's editorial in the June 1982 issue of the CDA Journal — "Geriatric Treatment — A Crying Need" — to be extremely stimulating. I am pleased that Dr. Lightman is so patently disturbed about the dental treatment that we as a profession are "actually delivering" to elderly patients. As Dr. Lightman indicates, the time for paying lip service to the needs of the elderly has long passed.

Please note that the Association of Canadian Faculties of Dentistry/L'Association des facultés dentaires du Canada is sponsoring a conference on "The Teaching of Geriatric Dentistry." This seminar is funded by Health & Welfare Canada. It appears to be the next step forward from surveys.

I understand from Dr. David Banting, chairman of the Conference, that the emphasis will be placed on "teaching" and especially to undergraduate dental students. It is to be urgently hoped that guidelines for curriculum development in this area will be developed, and that the dental

schools will view service for older persons as a curriculum priority, including, as Dr. Lightman suggested, some type of regular "outreach" service.

Dr. Lightman is to be congratulated on his forthright call for action.

G.W. Myers, DDS,
Executive Director,
Association of Canadian
Faculties of Dentistry.

Editor's note: Dr. Myers has written a supportive editorial on the subject of Geriatric Dentistry. It will appear in the October edition of the CDA Journal.

'A misprint?'

It is with considerable interest and disbelief that I note in your abstracted article "Human jaws are shrinking," published in the June 1982 issue of the Canadian Dental Association Journal (Vol. 48, No. 6, page 363), the statement "during the 2,750 million years of man's evolution . . .". Is this figure a misprint, or is this an astounding new discovery, previously unannounced to the rest of the scientific world, being surreptitiously published in your journal?

I suspect careless editing is the true answer to the above question, as is evident in so many other parts of your journal. The credibility of the Journal naturally suffers when such outlandish unsubstantiated statements as that made above is published.

G.H. Sperber
Professor
Faculty of Dentistry
University of Alberta

Editor's note: Professor Sperber's astonishment is justified. A reference in an article in the Journal of the American Dental Association, November, 1975, stated in part: "... life has been evolving some 2,750 years." A misinterpretation changed the reference in the CDA Journal article to "... 2,750 years of man's evolution." Ref.: Marshall, David; Changes in the skull — past, present and future — because of evolution, JADA 91: 938, 1975.

'Thanks for item'

One of my dental colleagues showed me a copy of the Journal of the Canadian Dental Association for July, 1982. I was flattered that you picked up the item about the milestone in my anesthetic career, the administration of 10,000 general anesthetics in dental offices.

Thanks also for mentioning the medal which I had made to commemorate the event. Most of the medals have been distributed to colleagues and friends. However, I do have a few medals remaining, if some of your readers would like to obtain one.

Thanks again for mentioning me in your Journal.

Marvin Kay, MD,
Toronto, Ontario

Editor's note: Dr. Kay can be contacted at 12 Peveril Hill Road South, Toronto, Ont. M6C 3A8.

CDA Retirement Savings Plan

Unit values of the Canadian Dental Association's Retirement Savings Plan stood as follows on July 31, 1982.

Common Stock Fund	\$45.8813
Fixed Income Fund	\$28.1830
Guaranteed Fund	\$23.9132
Balanced Fund	\$10.3018

Total assets (market value) of the plan were \$28,658,959.

The previous month's figures, as of June 30, 1982, stood as follows:

Common Stock Fund	\$43.9638
Fixed Income Fund	\$27.5030
Guaranteed Fund	\$23.6059
Balanced Fund	\$10.0088

Total assets (market value) of the plan were \$28,065,692.

For further information write to: Canadian Dental Service Plans Inc., Ste. 600, 2 Lansing Square, Willowdale, Ontario M2J 4Z3 or call the central information services of CDSPI At 1-800-268-5418 (497-7171 in Metro Toronto).

Les deux langues du pays

"Le docteur Bert J. Levin, D.D.S., M.Sc. (Dent.) de Toronto, Ontario, écrivait, dans la livraison de juin 1982 du Journal, une lettre de sens ambiguü.

Il se demande, en commentant la couverture du Journal de mars 1982, si cette publication est destinée aux dentistes de France.

Le docteur Levin semble oublier que le Journal est destiné aux dentistes francophones et anglophones du Canada. Il ne se rend pas compte que le Journal contient des textes français et des textes anglais à l'intention des dentistes des deux langues officielles du pays. Cette attitude n'est pas de nature à favoriser l'harmonie entre les deux peuples fondateurs du pays. Ou je fais erreur."

*Gérard de Montigny, DDS, MS, FADC, FCRD(C), FICD.
Professeur à l'Université de Montréal*



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Indications and Clinical Uses: Motrin (ibuprofen) is indicated for the treatment of rheumatoid arthritis and osteoarthritis. Motrin is also indicated for the relief of mild to moderate pain accompanied by inflammation in conditions such as musculo-skeletal trauma and post-dental extraction. Motrin is also indicated for the relief of pain associated with dysmenorrhea.

Contraindications: Motrin (ibuprofen) should not be used in patients who have previously exhibited hypersensitivity to it, or in individuals with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to acetylsalicylic acid or other nonsteroidal anti-inflammatory agents. (see WARNINGS)

Motrin should not be used during pregnancy, in nursing mothers or in pediatric patients because its safety under these conditions has not been established.

Warnings: Anaphylactoid reactions have occurred in patients with known A.S.A. hypersensitivity (see CONTRAINDICATIONS)

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported in patients receiving Motrin (ibuprofen). Peptic ulceration, perforation, or severe gastrointestinal bleeding can have a fatal outcome, and although few such reports have been received with Motrin, a cause and effect relationship has not been established. Motrin should be given under close supervision to patients with a history of upper gastro-intestinal tract disease.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in colour vision have been reported. If a patient develops such complaints while receiving Motrin (ibuprofen), the drug should be discontinued and the patient should have an ophthalmologic examination.

Fluid retention and edema have been reported in association with Motrin; therefore, the drug should be used with caution in patients with a history of cardiac decompensation or renal disease.

Motrin, like other nonsteroidal anti-inflammatory agents, can inhibit platelet aggregation but the effect is quantitatively less and of shorter duration than that seen with acetylsalicylic acid. Motrin has been shown to prolong bleeding time (but within the normal range) in normal subjects. Because this prolonged bleeding effect may be exaggerated in patients with underlying hemostatic defects, Motrin should be used with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients on Motrin should be cautioned to report to their physicians signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

When Motrin is added to the treatment program of patients who have been on prolonged corticosteroid therapy, and it is decided to discontinue this therapy, the corticosteroid should be tapered slowly to avoid exacerbation of disease or adrenal insufficiency.

Aseptic meningitis has been reported in connection with Motrin therapy in patients with systemic lupus erythematosus. Such patients may also develop hypersensitivity reactions to Motrin such as fever, rash or abnormal liver function more often than those with other disorders. Caution should therefore be exercised when considering Motrin therapy for patients with systemic lupus erythematosus.

Drug Interactions

Coumarin-type anticoagulants: Several short-term controlled studies failed to show that Motrin significantly affected prothrombin times or a variety of other clotting factors when administered to individuals on coumarin-type anticoagulants. However, because bleeding has been reported when Motrin and other nonsteroidal anti-inflammatory agents have been administered to patients on coumarin-type anticoagulants, the physician should be cautious when administering Motrin to patients on anticoagulants.

A.S.A.: Animal studies show that A.S.A. given with nonsteroidal anti-inflammatory agents including Motrin yields a net decrease in anti-inflammatory activity with lowered blood levels of the non-A.S.A. drug. Single dose bioavailability studies in normal volunteers have failed to show an effect of A.S.A. on Motrin blood levels. Correlative clinical studies have not been done.

Adverse Reactions: The following adverse reactions have been noted in patients treated with Motrin (ibuprofen):

Note: Reactions listed below under Causal Relationship Unknown are those which occurred under circumstances where a causal relationship could not be established. However, in these rarely reported events, the possibility of a relationship to Motrin cannot be excluded.

Gastrointestinal: The adverse reactions most frequently seen with Motrin therapy involve the gastrointestinal system.

Incidence 3 to 9%: nausea, epigastric pain, heartburn.

Incidence 1 to 3%: diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the gastrointestinal tract (bloating or flatulence).

Incidence less than 1%: gastric or duodenal ulcer with bleeding and/or perforation, gastrointestinal hemorrhage, melena, hepatitis, jaundice, abnormal liver function (SGOT, serum bilirubin and alkaline phosphatase).

Central Nervous System:

Incidence 3 to 9%: dizziness

Incidence 1 to 3%: headache, nervousness

Incidence less than 1%: depression, insomnia

Causal relationship unknown: paresthesias, hallucinations, dream abnormalities

Dermatologic:

Incidence 3 to 9%: rash (including maculopapular type)

Incidence 1 to 3%: pruritus

Incidence less than 1%: vesiculobullous eruptions, urticaria, erythema multiforme

Causal relationship unknown: alopecia, Stevens-Johnson syndrome

Special Senses

Incidence 1 to 3%: tinnitus

Incidence less than 1%: amblyopia (blurred and/or diminished vision, scotomata and/or changes in colour vision). Any patient with eye complaints during Motrin therapy should have an ophthalmologic examination (see PRECAUTIONS)

Causal relationship unknown: conjunctivitis, diplopia, optic neuritis.

Metabolic

Incidence 1 to 3%: decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS)

Hematologic

Incidence less than 1%: leukopenia and decreases in hemoglobin and hematocrit

Causal relationship unknown: hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes (e.g. purpura, epistaxis, hematuria, menorrhagia)

Cardiovascular

Incidence less than 1%: congestive heart failure in patients with marginal cardiac function, elevated blood pressure

Causal relationship unknown: arrhythmias (sinus tachycardia, sinus bradycardia, palpitations)

Allergic:

Incidence less than 1%: anaphylaxis (see CONTRAINDICATIONS).

Causal relationship unknown: fever, serum sickness, lupus erythematosus syndrome

Endocrine

Causal relationship unknown: gynecomastia, hypoglycemic reaction

Renal:

Causal relationship unknown: decreased creatinine clearance, polyuria, azotemia

Symptoms and Treatment of Overdosage: A nineteen month old child weighing 12 kg ingested from 2800 to 4000 mg of Motrin (ibuprofen) and presented with apnea, cyanosis and responded only to painful stimuli. Oxygen and parenteral fluids were given and at 12 hours she appeared completely recovered. Two other children (10 kg each) ingested 1200 mg of Motrin each and there were no signs of acute intoxication or late sequelae. A 19 year old male who had ingested 8000 mg of Motrin reported dizziness, and nystagmus was noted. He recovered with no reported sequelae after parenteral hydration and three days' bed rest.

In cases of acute overdosage, the stomach should be emptied by vomiting or lavage, though little drug will likely be recovered if more than an hour has elapsed since ingestion. Because the drug is acidic and is excreted in the urine, it is theoretically beneficial to administer alkali and induce diuresis.

Dosage and Administration: Rheumatoid arthritis and osteoarthritis:

The initial daily dosage in adults is 1200 mg divided into 3 or 4 equal doses. Depending on the therapeutic response, the dose may be adjusted downward or upward. The daily dosage should not exceed 2400 mg.

Maintenance therapy, once maximum response is obtained, will range from 800 to 1200 mg per day.

Mild to moderate pain accompanied with inflammation, dysmenorrhea: 400 mg repeated as required every 4 to 6 hours. The daily dosage should not exceed 2400 mg.

Children: Due to the lack of clinical experience, ibuprofen is not indicated for use in children under 12 years of age.

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New Québec Government — QDSA dental plan agreement signed, effective August 9

An agreement between the QDSA and the Government of Québec, modifying the extent of cutbacks originally proposed for that province's children's dental health care program, was reached in late July and came into effect on August 9.

The government softened its stand following negotiations with the QDSA. The provincial health department was attempting to cut back spending in the dental health care program to save an estimated \$28 million.

QDSA members met on July 17 and, according to a report from CDA governor Dr. I. Margolese, "all agreed to the package."

The "nearly 400 dentists" at the meeting considered the agreement "not bad," Dr. Margolese said, because all services will be provided to children to the age of 12, except prevention. These services will be administered in the schools or other community facilities by dental hygienists.

The government "is hiring 300 hygienists" to carry out these duties in the schools, said Dr. Pierre Y. Lamarche, director-general of L'Ordre des dentistes du Québec.

Dr. Lamarche said these hygienists will "be in touch with those children who would never go to a dentist's office. That's good. That's a real improvement."

CDA governor Dr. Jean Laporte said that under the new agreement, the Québec insurance plan "will pay for prevention for those aged 12 to 15."

Four dental services — examinations, x-rays, prevention and consultation — will be available for the 13 to 16-year-old group. "It will not include obturation or extraction," Dr. Laporte said.

The fee for recall examinations will include x-rays. The number of x-rays has been left to the discretion of the dentists.

Dr. Margolese said that parents who have coverage in private family dental care plans "will be able to pick up the slack" for services not included in the provincial plan for children in the 13-16 age group.

QDSA president Dr. Claude Chicoine was chairman of the negotiating committee.

Fee increase

The new agreement provides an 11.3 per cent increase for dentists participating in the provincial dental health care plan.

Signing Bodies

The QDSA and ODQ noted that the Québec Government might be opening a door for dental hygienists to sign agreements individually in

certain areas of dental health care policy.

The dental groups were concerned because this would be a departure from the long-standing procedure in which only doctors and dentists could sign such agreements with the government.

The government appeared interested in "following the lead of Saskatchewan," said Dr. Lamarche, where the government first signed individual agreements with hygienists about 15 years ago.

The concern was alleviated when the QDSA-government agreement was reached. The QDSA found that the signing authority rule had not been altered.

ODQ 'at end of road'

"We feel we've come to the end of the road."

This is how Dr. Pierre Y. Lamarche described the status of the campaign by the L'Ordre des dentistes du Québec against the Québec government's new dental health care policy that has transferred traditional dentists' services to dental hygienists.

Dr. Lamarche, director-general of the ODQ, told the CDA Journal at the end of July that "we've made written presentations and sent delegations, but the government has ignored all these representations."

Legal advisers are still studying the circumstances to determine whether the ODQ should challenge the government policy in the courts, on the basis that the transfer of duties is "dangerous to the public."

"Only dentists have the authority to delegate these duties," and not the government, Dr. Lamarche said.

The new arrangement is "not acceptable to dentists."

Dr. Lamarche said "almost all the

dentists in the province" have shown "they respect the position of the ODQ."

His remark referred to the second mailing of commitment forms to dentists in Quebec, which they were asked to sign and return, indicating their support of the ODQ position. More than 2,000 of these commitments had been signed and returned by the end of July.

Regulating professionals

The ODQ continues to be concerned about the Québec government's belief it can regulate professional activities within incorporated professional organizations in that province.

Late in July, an inter-professional council was being organized to oppose, on a united front, this assumption by the government.

The intent of the dentists and other professional groups in sympathy is to convince the government that L'Office des professions is exceeding its authority.

Fluoride shortage: Supplies dwindle because fluorides are by-product of depressed chemical fertilizer industry

A slowdown in the production of hydrofluosilicic acid (HFS), a phosphate fertilizer by-product used to fluoridate community water supplies, has caused a fluoride shortage in both Canada and the United States.

Because of tight money, high interest rates and higher prices, farmers have begun to drastically reduce their purchases of chemical fertilizers. Bill Hamilton, associate executive secretary of the Canadian Federation of Agriculture, told the CDA Journal "our indications are that farmers in Canada are finding the price too high. A whole lot less fertilizer was put into the ground this spring because of the economic situation," he said.

Fertilizer is being stockpiled at plants and warehouses and the companies are either curtailing production or closing temporarily until the demand increases.

Municipalities that fluoridate their water with HFS are being forced to look for other sources, or reduce their fluoride levels.

HFS manufacturers and distributors predict the shortage will last at least until this fall, when they expect the planting of winter wheat will increase the demand for chemical fertilizers.

The Centers for Disease Control in Atlanta, Georgia, which maintains a national focus on fluoridation in the United States, estimates the shortage there may continue into 1983. Thomas Reeves, fluoridation engineer at CDC, said there was a "mild" shortage in 1973, "but nothing compared to this summer's very unusual situation."

By mid-July, major HFS manufacturers in the United States had either reduced production or shut down altogether.

As a result, some municipalities dependent upon HFS supplies may be forced to seek alternative methods of fluoridation with sodium fluoride,

which is not affected by the production slowdown because it is not a by-product and is produced by a different process, Reeves said.

By mid-summer, about 10 of the large municipalities in the United States were already operating on a week-to-week supply basis, and several others, including Seattle, Washington, had actually stopped fluoridating the water supply.

Difficulties in Canada

In Canada, both Winnipeg and Edmonton reported difficulty maintaining normal HFS levels.

Dr. Leo Konyk, Winnipeg's director of dental services, told the Journal late in July that the city will be getting only 50 per cent of its HFS requirements from its regular supplier, Chemtech Industries Inc., of St. Louis, "beginning in August and continuing for an indefinite period."

He expected the reduction would continue for about four months and by that time, the city would probably receive its normal supply again. If not, Dr. Konyk said, the city will have to supplement the HFS with sodium fluoride supplied by Prairie Industrial Chemicals. He hoped it would not come to that, "because it would cost Winnipeg four times the expense" of fluoridating the water with liquid HFS. Equipment to dissolve the sodium fluoride would have to be purchased and installed to convert it to a liquid before it can be mixed with HFS.

Dr. Konyk said the oral biology department at the University of Manitoba advised the city to supplement "with something else" if the shortage lasted longer than six months.

As severe as in U.S.

According to several of the major HFS suppliers in Canada, that shortage will be just as severe here as it is in the United States.

Cominco, the major HFS supplier

for British Columbia and Alberta, and parts of the western U.S., including Seattle, had already curtailed supplies to municipalities until its production plant resumed operations in August.

When Jack Merryfield, chemical sales manager, spoke to the CDA Journal in late July, he explained that Cominco's HFS production was halted temporarily when their smelter shut down. This was because of weak demand and poor prices. "We stocked up prior to the shutdown to cushion the municipalities as best we could. But Edmonton and Seattle will probably have to go without HFS for one week. We tried to get supplies from elsewhere, but there's a shortage all over."

The situation is no better for CIL Inc. of Willowdale, Ontario, the major HFS supplier for Eastern Canada.

In mid-July the plant ceased production for three weeks.

Bruno Lenarduzzi, production manager, said in mid-July "it's been a little bad here in the last few weeks." CIL had been forced to "scour all its sources in the U.S." for supplies.

"We keep the municipalities stocked ahead, but the situation is going to be tight now, no doubt about it. I suspect the situation will improve by fall," Lenarduzzi said.

CIL's Vic Mudie, technical sales representative for the general chemicals division, said his company was producing only 50 per cent of the HFS being supplied to the municipalities. The remaining 50 per cent was being supplied from other sources in North America.

"It's tight, I won't deny that," he said. "But we're still able to supply whatever our customer wants."

Both he and Marcel Sampson, CIL's sales representative for Ottawa and the Province of Québec, said that

(continued on next page)

Convocation of Royal College of Dentists of Canada

An Honorary Fellowship was conferred on Dr. Robert E. Moyers, an orthodontist and international authority on human growth and development, at the annual convocation of the Royal College of Dentists of Canada, held May 8 at Hart House, University of Toronto.

Dr. J.H.P. Main, President, also conferred Fellowships by examination on Drs. D.C. Bardsley, Alexander Bowman, L.A. Chapnick, P.L. Cyr, Daniel Forget, Aron Gonshor, B.J. Lahiffe, C.A. McCulloch, K.R. Morley, Colin Price, R.G. Stapleford and D.K. Yip. Membership of the College was also conferred on 93 specialists.



The annual convocation of the Royal College of Dentists of Canada was held May 8 at Hart House, University of Toronto. Pictured following the convocation ceremony are prosthodontists Drs. Paul Jean (member), Alexander Bowman (Fellow), J. Anderson (member) and F.L. Zarb (member).

CDA Council on Health Care meets



CDA's Council on Health Care met at CDA headquarters in Ottawa May 27-28, and posed for a photo during a respite from a lengthy agenda. Front row, left to right, are: Dr. P.R. Crawford, Executive Liaison; Ms. Suzanne Mader, CDAA; Dr. Howard Horsman, chairman; Dr. Ed K. Fukushima, and Miss Kate MacDonald, CDHA. Second row, are: Dr. Earl Freidin, Dr. R.A. Janes, and Lt. Col. Ron Carver.* Third row, are: Col. J.F. Begin, CFDS; Dr. D.E. MacLeod, Dr. Dave Crocker, Dr. Ron S. Bartalos, Dr. John Rooney and Dr. Andrew Toeman.

*Deceased

(Continued from previous page)

all their customers, including the 12 municipalities in Québec and major cities such as Toronto and Ottawa, were contacted at the onset of the shortage and questioned about their inventories.

'Don't anticipate difficulty'

Mr. G.A. Missingham, head of the municipal water unit for the Ontario Ministry of the Environment's pollu-

tion control branch, told the Journal that CIL informed him in July they would be able to meet the HFS requirements of the municipalities. "There were misgivings (at the time) but we don't anticipate any difficulty," he said.

Canadian producers of phosphates, said Jim Brown, managing director of the Canadian Fertilizer Institute, are in a better position than their

counterparts, because here they have been forced to cut back production by 15 per cent, compared with an average production decrease of 25 per cent in the United States.

A memo from Lloyd Bowen, the Canadian Dental Association's fluoridation officer, has been circulated to the provincial dental associations, alerting them to the current fluoride shortage.

TODAY'S COLGATE: TWO FLUORIDE REMINERALIZATION.

Today's Colgate was developed on the principle that if a toothpaste combines two fluorides which act differently, it may provide enhanced remineralization over a single fluoride toothpaste. We believed this would result in fewer cavities for your patients than ever before.

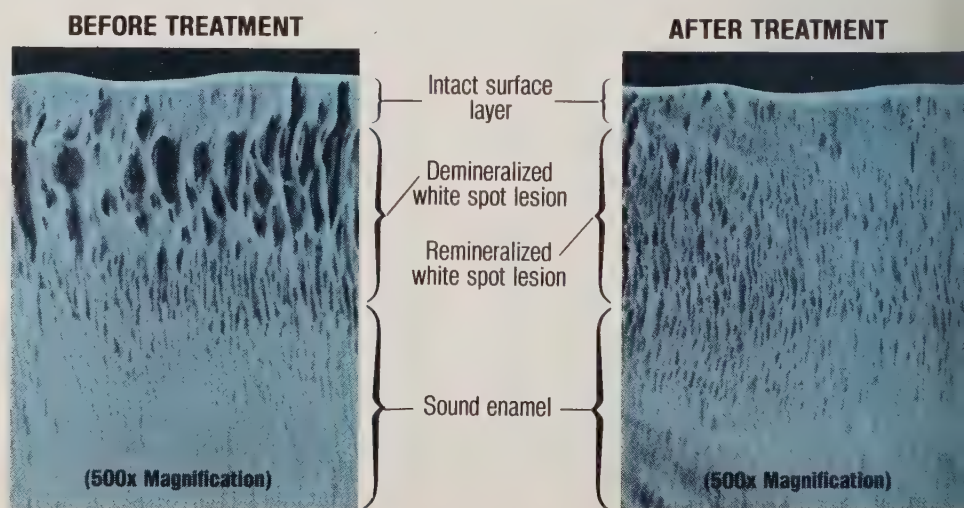
REMINERALIZATION.

Remineralization is the reversal of the demineralization process before a white spot lesion becomes a cavity (1). Studies have indicated that the presence of fluorides in demineralized enamel improves the natural remineralization process (2-5).

COLGATE'S TWO FLUORIDE STUDY.

In vitro studies (6) on demineralized enamel show that treatment with Colgate's combination of sodium monofluorophosphate and sodium

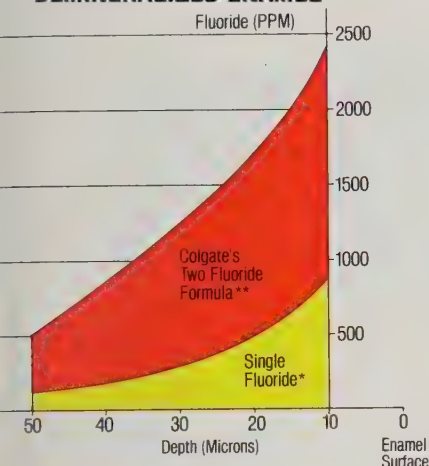
fluoride** actively promotes more complete remineralization of white spot lesions than a single fluoride formulation*. This improved remineralization of white spot lesions, we believe, ultimately leads to a greater reduction in cavities.



HOW TWO FLUORIDES REMINERALIZE MORE COMPLETELY.

Laboratory research shows that Colgate's combination of sodium monofluorophosphate at 0.76% and sodium fluoride at 0.10% delivers significantly more fluoride deeper into demineralized enamel, thus providing superior conditions for remineralization.

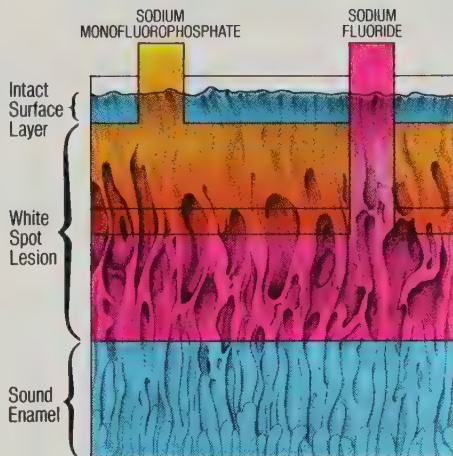
FLUORIDE UPTAKE BY DEMINERALIZED ENAMEL



Within the white spot lesion, sodium monofluorophosphate remineralizes enamel primarily at the surface while sodium fluoride penetrates deeper to remineralize sub-surface regions. This combined remineralizing action

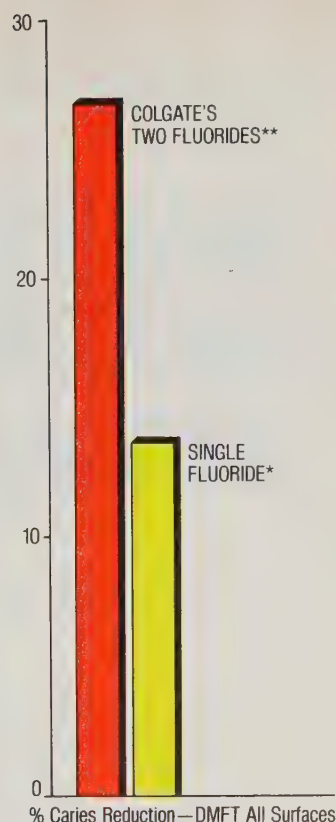
of Colgate's two fluoride formula promotes more complete remineralization of white spot lesions than a single fluoride formulation*.

REMINERALIZATION ACTION OF COLGATE'S TWO FLUORIDES



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REFERENCE

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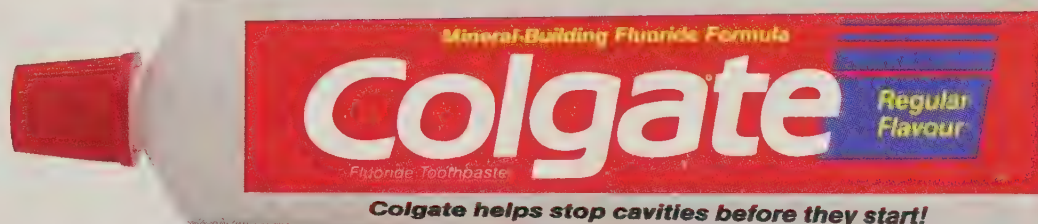
* Sodium monofluorophosphate (0.76%)

** Sodium monofluorophosphate (0.76%) and sodium fluoride (0.10%)



+ "Colgate Toothpaste contains sodium monofluorophosphate and sodium fluoride which are, in our opinion, effective decay preventive agents and are of significant value when used in a conscientiously applied program of oral hygiene and regular professional care."

Canadian Dental Association



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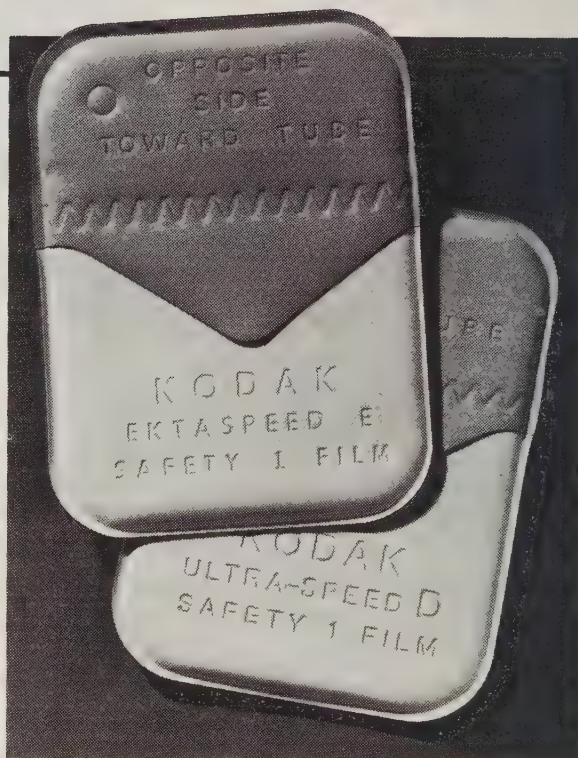
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BRINGING IMAGINATION AND
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What to do if you are sued — CDSPI

Statistics tell us that there is a 40 per cent chance that you will be sued for malpractice sometime in your career. Consequently, you will be wise to be aware of the correct way to handle this kind of unfortunate event.

The current Canadian Dental Association Malpractice Policy as administered by CDSPI on behalf of the CDA and all provincial associations (except Ontario) contains some rules on this subject which should be noted.

You should give immediate notice to the insurance company's adjuster upon the happening of an accident or occurrence which you feel could reasonably give rise to a claim for malpractice. If a claim is made against you, you should forward to the insurer any notice, demand, whether verbal or written, or legal paper received by you in connection with the claim, as soon as it is obtained.

You are also expected to co-operate with the insurer in a general way and, in particular, in assisting, securing and giving evidence, attending hearings and trials, and in enforcing any rights that you may have against any other person in order to diminish the claim. The insurer, on the other hand, requires your consent to admit liability on your behalf. The insurer can negotiate a settlement without admitting liability on a "without prejudice basis."

You should not admit liability for any potential claim, because if you do, the claim will be at your own cost.

Knowing the rules is one thing, applying them is another. The moment you become aware of a claim or occurrence which is likely to give rise to a claim, you should notify the local office of the adjusting firm assigned to act in your province. The lists of adjusting firms are provided for you at the end of this article and should be

noted by you for your particular area. Notice should be given immediately by telephone and confirmed in writing. All written material relating to the particular incident should then be set aside and kept in one secure place for review by the adjuster when you are contacted.

Your notification to the adjuster implies your permission for him to handle the negotiations on your behalf so from this point on, the adjuster should be taking all matters out of your hands and bringing the claim to a smooth and rapid conclusion with the complainant. Your job is to get on with the practice of dentistry and stay well clear of the negotiations. You will, however, be kept informed as the matter progresses. If the adjuster encounters difficulties or has to engage legal counsel, you will be advised of the details relating to the solicitor handling the file.

There are, however, situations where you receive first notification of a possible claim which requires an immediate legal response. If you find yourself in an emergency legal situation and there is simply not the time to go through the proper channels, then you should engage your own counsel to act for you. When the immediate crisis has passed, the claim can then be assigned through the usual channels to the insurer, and providing the claim is covered by the policy and the policy conditions are complied with, the insurer will pay the legal costs you have incurred up to that time.

The foregoing applies to claims for malpractice. However, there are other dentist/patient difficulties such as disagreement over fees or the extent of work performed, which are not consigned to malpractice insurance procedures but instead are dealt with by a provincial or local society review committee. Even though a matter

coming from these committees has the potential to develop into a full malpractice claim, the insurer has agreed that the activities of such committees shall not prejudice your position as an insured person. However, before consenting to the settlement recommended by the committee, insist the complainant sign a release form discharging you from further liability. Remember, *you still have the obligation to report any occurrence to the adjuster which may reasonably be expected to give rise to a claim under the policy.*

If you remember these guidelines and act accordingly, there is little chance of having a problem because of failure to comply with policy rules concerning reporting claims. Whether or not a review committee is involved in your case, the prudent course is to err on the side of safety and report the matter to the adjuster in all cases. He can be requested to put the matter on a surveillance basis only.

The purpose of the foregoing article is to explain the procedures to be followed in the event that an individual participating in the CDA-sponsored malpractice program is faced with a malpractice claim or potential claim. It does not override or amend the terms and conditions set out in your policy which must be carefully complied with in order to maintain your coverage. Those insured under other insurance policies or programs should consult their own policies regarding the proper procedures to be followed.

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(continued on next page)

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CDA Council on Dental Materials and Devices



On June 3 the Council on Dental Materials and Devices held a meeting at CDA headquarters, and posed for the Journal camera. In the front row, left to right, are: Dr. P.C. Desautels; Dr. Denis Smith; Dr. R.Y. Barolet, Chairman; and Dr. L.N. Johnson. Back row, are: Dr. J.M. Gourley; Dr. D.W. Jones; Dr. D. Gau; Dr. P.T. Williams; and Dr. P. Blais, Health and Welfare Canada.

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Dental equipment relief project in Caribbean spearheaded by former Lions Club president

Bob McAllister's middle name should have been "Charity".

The past president of the Azilda Lions Club near Sudbury, Ontario, and chairman of its international aid committee has devoted every possible moment of his time for the past four years to improving the health care of many of the underdeveloped countries in the Caribbean. He now wants to do the same for several South American countries.

McAllister cuts through the 'red tape' to collect and transport hospital and dental equipment to these countries, where even a surgical forcep is considered a luxury.

It is common, McAllister said, to see a young Peace Corps volunteer dentist in a Caribbean island have only 12 sets of forceps and a syringe that he "back-packs round the villages to treat dental emergencies." But this is a big improvement over previous years when dental service to the islanders did not exist in any form.

When McAllister first visited the island of St. Lucia, he discovered the island's largest 315-bed hospital in the capital of Caspries had no crank-up beds. Now, thanks to his efforts, the hospital is equipped with 150 of these beds and x-ray facilities.

He first became aware the people living in these underdeveloped countries desperately required medical and dental facilities while on a holiday trip to St. Lucia and nearby islands many years ago. But it wasn't until he retired from Inco in 1978 with the support of a government disability pension that he decided to do something about the situation.

"I'm working harder now that I'm retired than when I was with Inco," McAllister said.

Largest relief project

The 53-year-old husband and father of seven, backed by the Azilda

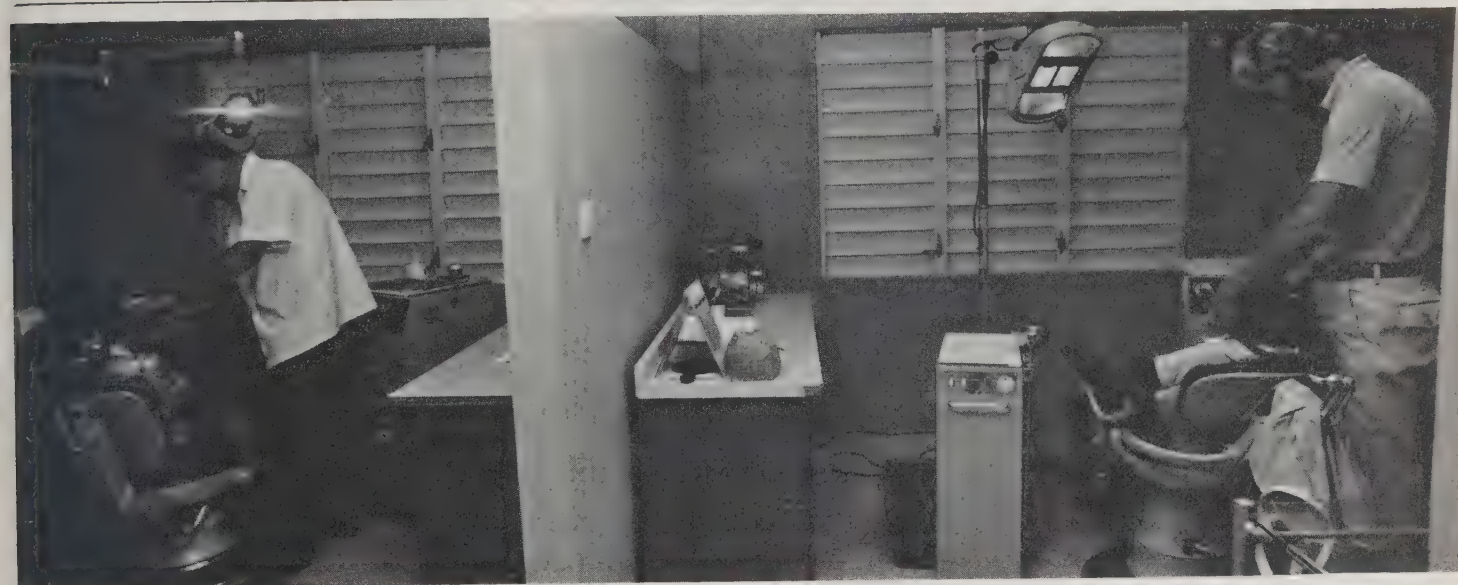


Using x-ray equipment — considered a luxury on many Caribbean islands — Dr. Jerry Peister, a Peace Corps volunteer dentist, is photographed during an examination.

Lions Club, spearheaded the relief project, now the largest ever undertaken by a single service club in Canada or the United States, McAllister said. Assisted with transportation of the goods by the Department of National Defence and financially with annual grants from the Canadian International Development Agency, McAllister and other members of the Lions Club bring the goods to where they are needed. St. Lucia, Dominica, St. Vincent, St. Kitts, Jamaica, Guyana and even Peru in South America, have all benefitted from this relief project.

McAllister investigates individual requests for equipment to determine the validity of the request. He then canvasses hospitals, organizations and individuals for the equipment, and arranges for shipment by the Canadian Armed Forces to the appropriate country. By special agreement, the Armed Forces transports the equipment for free on regular training flights to the area.

McAllister accompanies each shipment to organize its distribution and assembly. A qualified technician goes with him to install equipment when necessary.



Working in this "modern" dental clinic on the island of St. Kitts are Dr. Julian Mitchell, left, Regional Dental Officer for the Eastern Caribbean, and Dr. Jerry Peister, a Peace Corps volunteer dentist.

On one trip in April, 1982, McAllister left from Trenton, Ontario, on one of three Armed Forces planes. He unloaded a shipment from the one plane in St. Lucia for the nearby islands and flew to Georgetown, Guyana, where the rest of the equipment from the other two planes was installed in the new hospital being built in Demerara.

But even all this is still not enough.

According to McAllister, "the dental situation is starting to improve. But by our standards it is still grim. There is always a need for dentists, but the dentists presently there have nothing to work with. And many natives have terrible teeth because the diet is deficient. Their teeth are all rotten.

'Tragic situation' in Caribbean

"It is almost criminal. A very tragic situation," he said.

Even the most basic dental equipment and tools are scarce. "You name it, we need it," McAllister said.

The list is endless: air compressors, hand-pieces, forceps, chairs (preferably the wood pedal type), self-contained operatory units, syringes, mounted lamps, dental stools, suction

units, amalgamators, x-ray equipment, and hand instruments. "Any good quality, simple dental equipment that is functional and straightforward to install is welcome," he said.

The voluntary efforts of McAllister and the Azilda Lions Club have not gone unnoticed by the powers-that-be.

McAllister has received "a lot of publicity," as well as numerous 'thank-you' letters from organizations and dignitaries. Senators, ministers of education and health from several Caribbean countries, and Canadian organizations including the Ontario Hospital Association, Overseas Book Centre (for whom McAllister ships books to nurses' training centres and schools in the Caribbean), the Canadian Hearing Society Foundation, and National Defence have all commended his mission.

He has even received correspondence and telephone calls from Prime Minister Trudeau, who wrote in one letter: "I was delighted to learn of the Azilda Lions Club's generous donation to the general hospital of Soufrière, St. Lucia. I would like to com-

mend all members on this worthwhile endeavour. The co-operation between your two organizations for the welfare of those in need is an inspiring example for society. It is my sincere wish that as a step towards even more widespread redistribution, all countries will partake in the same spirit of sharing and friendship."

'Remarkable individual'

— Dr. Thompson

He's a very remarkable individual," Dr. William Thompson, president-elect of the Canadian Dental Association, said. "I think it is most commendable the effort that a very small organization like that is making to the health care system in these underdeveloped countries, and it should be supported. Canadian dentists should support him with any used or old equipment they have."

After all, McAllister said, "I'm doing the biggest sales job of my life right now and we (the Azilda Lions Club) are really doing this on behalf of Canada."

Dentists who wish to donate equipment to this relief project may contact Bob McAllister at Box 883, Azilda, Ontario P0M 1B0, (705) 983-4653.

Agreement reached in Newfoundland cutbacks

The Government of Newfoundland and the Dental Association of that province reached an agreement in mid-July which restores the second annual visit in the Children's Dental Program.

Health Minister Wallace House had announced in May that the government proposed, in a budget-cutting attempt, to eliminate the second visit which he believed could save the province up to \$700,000 annually.

The Health Minister had expressed

the opinion that second visits were not completely essential and not cost efficient.

'Compromise'

NDA negotiating committee chairman Dr. Ramon Winsor said the settlement was "a compromise between the dentists and the government."

The new policy will provide prophylaxis and fluoride treatment and one set of bite tests per year.

"They are cutting back in the num-

ber of X-rays and the dentists have lowered their fee for examinations by one dollar," Dr. Winsor said.

A separate department, which will be called Dental Public Health and Prevention, is being set up, apart from the provincial dental plan, he said.

Under this department's authority, five geographic areas are planned, with a hygienist in each. These hygienists will administer the prevention program.

Dental faculty associate dean is not a dentist

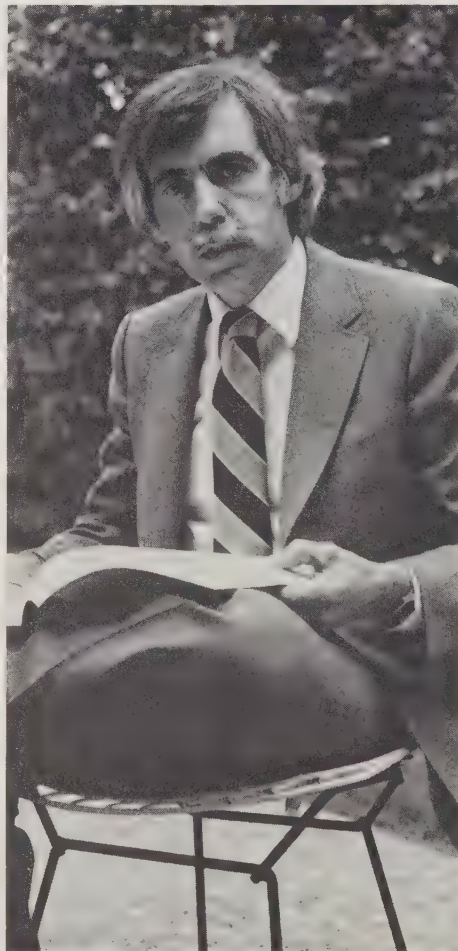
Jean-Louis Fortin is Associate Dean of the University of Montreal's school of dentistry. But he is not a dentist.

Dr. Fortin, whose major interest is education, is the only non-dentist in Canada to hold such a post.

He believes he has a certain advantage as an "objective outsider" to closely scrutinize the dental profession and the education system in dental schools.

An academic, sociologist, educator and administrator, he first joined the dental faculty as an administrative assistant. He had earlier worked in the insurance business and with school boards in the Montreal area.

In his recently-published PhD thesis, "L'Impact de la Formation Universitaire sur les Modes de Pratique Dentaire," Dr. Fortin examines the traditional functions of a university and its effect on professional education in general, and the dental educa-



Jean-Louis Fortin

tion in particular. He suggests that a university's tendency toward specialization has accentuated the division between the dentists and other professions.

Advocates group practice

In his research, Dr. Fortin makes frequent use of questionnaires. Responses to a recent questionnaire sent to 2,300 dentists in Québec, revealed that about 40 per cent of the dentists work alone. Although this is the lowest percentage in Canada and the United States, Dr. Fortin would like to see this figure drop even lower. He would prefer to see it reach the point where all dentists in Québec — and for that matter, in all of Canada — form group practices.

"Only dentists can evaluate dentists. There is no evaluation of a dentist's work if he works alone," Dr. Fortin said. He believes group practice ensures that there is an ongoing quality control and peer evaluation, and hence, patient satisfaction.

10 ways to pay less for insurance ... and get better protection

It's easy to spend \$2,000 a year or more on insurance — and still not have adequate protection. If you want better protection for less money, here are 10 things to think about:

1. Many agents like to sell life and disability policies with "level" premiums — premiums that don't increase as you grow older. In effect, you're overcharged today so you can pay less tomorrow. In a high-inflation period, that works for the insurance company. Usually, it's cheaper for you to buy a "step-rated" policy — one where the premium does increase as you grow older. The step-rated policy always gives you coverage for a lower cost in the early years — and you can use the saving to good advantage for debt reduction or investment.
2. Consider paying your premiums quarterly, rather than annually. At today's interest rates, keep the money in the bank as long as you can. There's no increased cost to you if you pay premiums quarterly to the Canadian Dentists' Insurance Program.
3. Low deductibles mean higher premiums. On your office contents insurance, for example, you can save 10-15% of premium costs by increasing your deductible from \$250 to \$500. The same principle applies to insurance on your car and home.
4. Keep an accurate and up-to-date inventory of the contents of your home and office. Otherwise, you may forget some items when making a claim after a serious loss.
5. Disability policies pay benefits during sickness and accident only after a "waiting period". The shorter the waiting period, the higher the premium. Consider shifting to a longer waiting period and using the saving for investment or for increasing your basic coverage to a more adequate level.
6. Insurance is a competitive industry and costs vary from policy to policy and company to company. You can save substantial amounts if you shop around. Through its insurance consultants, CDSPI can help you understand the differences in two competing policies so you can make valid cost comparisons.
7. Life insurance policies which combine "savings" with "protection" often mean high-cost protection, low-return on your savings, and more difficulty in understanding exactly what you've got. In most cases, you'll be better off if you stick to term life insurance and set up a separate savings and investment program.
8. The most expensive insurance of all is insurance that doesn't provide enough coverage after a major loss. So keep your coverage up to date: remember to insure your property for the cost of replacing it at today's prices. When renewing, be sure to add the value of any new property to the total amount of coverage.
9. Even with adequate coverage, loss or damage to property will cost you time and money. You can help prevent office losses by a few simple steps: proper locks, doors, and windows on your office; and making sure water supplies to your chair are turned off before you leave.
10. Don't buy insurance at all if you can afford the loss. Concentrate on insuring yourself against major losses which could cripple you financially.

An important service of the Canadian Dentists' Insurance Program is to provide help and information on insurance matters to members of the profession. We'll have our insurance consultants evaluate any insurance proposal or help you assess your own needs.

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Federal government wants control of health care programs — Dalhousie professor says

The federal government is jockeying for control of the health program in Canada "because it regards a national program as important for national unity."

Professor Larry Nestman, Director of Dalhousie University's Health Services Administration Program, made the statement in an Issues in Dentistry presentation during continuing education sessions at Dalhousie Dental School on June 18.

Speaking on the subject "Government Involvement in Dentistry: Conflict. Co-operation or Tolerance," he said the federal government wants to have a direct presence in the health field, so that the public knows the extent of federal and provincial contributions.

Prof. Nestman also believed that when the federal government gains financial control of health services, it may also develop a national health insurance program.

The provincial governments will go down fighting on the issue, however, because several provinces have developed their own programs, and they wish to continue to administer and control the health and social services delivery system, determine fiscal policy and control grants, independent of federal authority.

Federal giant stirring

However, the federal government already has plans to merge the Medical Care Act and Hospital Act into one new document, which will result in a "profound structural change," Prof. Nestman said.

He sees the movement by Health and Welfare Canada as one that is "chipping away at the structure of health care in this country." The roles will change, he said. "We are on

the prevention bandwagon in this country."

He believed there may be conflict in government-citizen relationships, because it will "influence our lifestyles and the roles of the professionals will change drastically." There will be major changes in the delivery of professional health care and a search for alternative methods of payment for those services.

Reaction: to "oppose any involvement by government"

The reaction now by professionals is to "oppose any involvement by government," he said. They will also oppose changes in quality of care or relocation. "More and more the arguments are to protect self-governing professions."

The provinces in Canada are now working through these self-governing professions to effect changes in the health delivery systems, he said.

In the federal government's program to gain control of national services, it is seeking detailed information on all health services in Canada and incomes of professionals involved. "When you accumulate information, you also accumulate power," Prof. Nestman said. The bureaucrats will wield this power, he believed.

Rationing of services

Health services were described as "a growing industry in a contracting economy," and he said he sees an ever-increasing possibility that health services will be rationed in Canada.

For the first time, he said, "administrators are being fired for overspending." The brakes are being ap-

plied "with a great screech." This can create a major health services dilemma in this country, Prof. Nestman said, because of the growth of health services and the increasing need, because of this country's aging population factor.

A number of recent commissions and reports have recommended "radical surgery" in health care budgets, he said.

Extra billing — red-hot issue

The Hall Report of 1980 recommended that health care plan practitioners receive a higher level of remuneration and that there should be no extra billing. It also stated that binding arbitration should be used to settle pay disputes. Now, however, professionals regard binding arbitration as a "crude and blunt instrument" for such sensitive negotiations.

Extra billing is "a red-hot issue," Prof. Nestman said, and there are ongoing discussions about how to "put the lid on extra billing." However, he said, Health and Welfare Canada prefers not to outlaw it completely. The debate is continuing, and "it is ferocious."

Effect of women

One of the important changes in the health professions is the entrance of women into these "traditionally male preserves," Prof. Nestman said.

"Women are bringing a different touch, and coming out with different attitudes." Many, he believed, are interested in the aspect of a nine-to-five job, which makes the consideration of salary, rather than professional fees for service "very attractive."

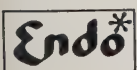
"The sociology of dental practice is changing very rapidly because of the advent of hygienists and dental nurses," he said.



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WARNINGS: Oxycodone can produce drug dependence of the morphine type and has the potential for being abused. Psychic dependence, physical dependence and tolerance may develop upon repeated administration, as with other oral narcotic medication. May impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as driving a car or operating machinery. Patients should be cautioned accordingly. Additive CNS depression may occur in patients receiving other narcotic analgesics, general anesthetics, monoamine oxidase inhibitors, tricyclic antidepressants, phenothiazines or other tranquilizers, sedative-hypnotics or alcohol. If combined therapy is contemplated, the dose of one or more of the agents should be reduced. Safe use in pregnancy has not been established relative to possible adverse effects on fetal development, therefore Percocet or Percocet-Demi should not be used in pregnant women unless, in the judgment of the physician, the potential benefits outweigh the possible hazards. The administration of Percocet or Percocet-Demi to obstetrical patients in labor may be associated with respiratory depression of the newborn. Percocet should not be administered to infants or children, although Percocet-Demi may be considered for children of six years or older.

PRECAUTIONS: The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a pre-existing elevated intracranial pressure. The diagnosis or clinical course in patients with head injuries or with acute abdominal conditions may be obscured by narcotic drugs. Give cautiously to elderly or debilitated patients due to the risk of cardiac or respiratory depression, as well as to patients with hemorrhage, severe impairment of hepatic, respiratory or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture. Narcotic analgesics should only be employed for the treatment of headaches when no other treatment is effective, in order to minimize risk of psychological and physical dependence.

ADVERSE REACTIONS: Light-headedness, dizziness, sedation, nausea and vomiting may occur, as well as euphoria, dysphoria, constipation and pruritus.

DRUG INTERACTIONS: May be additive with other CNS depressants.

MANAGEMENT OF OVERDOSAGE: Signs and symptoms: Respiratory depression, extreme somnolence progressing to stupor or coma, skeletal muscle flaccidity, cold and clammy skin, and sometimes bradycardia and hypotension. In severe cases, apnea, circulatory collapse, cardiac arrest and death may occur. Acute acetaminophen intoxication is characterized by anorexia, nausea, vomiting and sweating within two or three hours of ingestion, and possibly cyanosis with methemoglobinemia, enlargement and tenderness of liver, accompanied by abnormally high liver function tests, occur within 48 hours, followed by jaundice, coagulation defects, myocardialopathy, encephalopathy, renal failure and death due to hepatic necrosis. A dose of 10 g of acetaminophen is intoxicating, possibly fatal in excess of 15 g. Hepatic toxicity occurs when the plasma levels reach 300 µg/ml within four hours of ingestion. **Treatment:** Re-establish adequate respiratory exchange. Naloxone, nalorphine or levallorphan are specific antidotes against narcotic-induced respiratory depression. An appropriate dose of antagonist should be administered preferably intravenously, and repeated as needed to maintain adequate respiration; the patient should be kept under continued surveillance. Instructions in the package insert provided by the manufacturer should be carefully followed. Do not administer an antagonist in the absence of clinically significant respiratory or cardiovascular depression. Employ oxygen, intravenous fluids, vasopressors and other supportive measures as indicated. Gastric emptying by emesis or lavage may be helpful. Hemodialysis carried out within ten hours of ingestion may be of some value. Plasma levels of acetaminophen should be determined.

DOSAGE AND ADMINISTRATION: Percocet Tablets: Usual adult dose is one tablet every six hours as needed for pain.

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DOSAGE FORMS: Percocet Tablets: Bottles of 40, 100 and 500 white, scored tablets, each containing oxycodone hydrochloride 4.5 mg, oxycodone terephthalate 0.38 mg, acetaminophen 325 mg, caffeine 32 mg.

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Complete prescribing information available on request.

Reference

1. Chasko, W.J.: Pain-free dental surgery: Post operative extension of the pain-free state. J. DC Dent. Soc. 1956.

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Briefly —

Dentists and doctors are among the professionals who have recently been given some relief from the federal tax department in the May 31 revision of regulations on depreciable property.

Previous to the Nov. 12, 1981 budget, small tools, cutlery and uniforms could be written off fully in the year of acquisition. However, the budget proposal in November allowed only six months of depreciation in the year of purchase.

Since May 31 of this year, these items have been exempted from the original November proposal.

One hundred per cent write-off in the year of acquisition is again allowed on such items as: a die, jig, pattern, mould or last, a medical or dental instrument costing less than \$100, if acquired before May 26, 1976, or \$200, if acquired after May 25, 1976; linen, a tool costing less than \$100, if acquired before May 26, 1976, or \$200 if acquired after May 25, 1976; a uniform, and the cutting or shaping part in a machine.

(These items are listed as Class 12 property, Schedule II of the Income Tax Regulations).

♦♦♦♦♦♦♦♦

Dental students, like all other sectors of the Canadian public, are unlikely to pass up a good deal in these difficult economic times.

And one of the best available is what comes with a \$12 student membership fee in Canadian Dental Association.

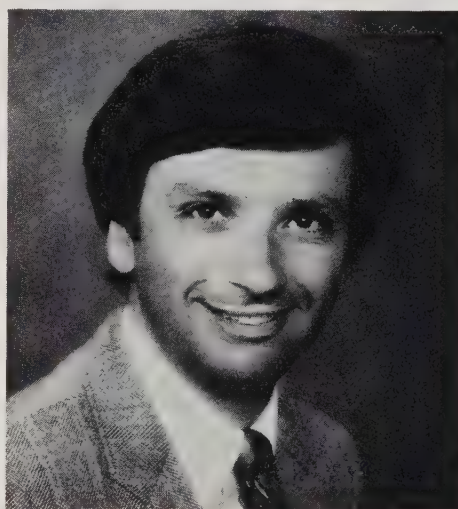
Student members receive a subscription to the CDA Journal and student newsletter, access to undergraduate dental insurance, representation on CDA's Council on Student Affairs and Board of Governors, a free graduate package of basic dental insurance and a six-month Association membership.

Figures speak for themselves. Last year's student membership level — 94.5 per cent of all undergraduate students — is clearly indicative of the popularity of CDA membership.

♦♦♦♦♦♦♦♦

Dr. Ronald J. Markey of Richmond, B.C. has been elected President of the College of Dental Surgeons of British Columbia for 1982-83.

Vice-presidents are Dr. Serge Vanry and Dr. John Silver, both of Vancouver. Treasurer Dr. Jack Penzer of Langley, was returned by acclamation.



Dr. R.J. Markey

Five members-at-large, elected to the Council from among seven candidates, are: Dr. Al Floyd of Kamloops, Dr. Robert Steed of Nelson, Dick Thorpe of Burnaby, Dr. Julian Thorsness of Prince George and Dr. William Walter of Vancouver.

Dr. Markey has served on the Council since 1979. He is one of the three B.C. College delegates to the Canadian Dental Association's Board of Governors.

He graduated from McGill University's Faculty of Dentistry in 1969 and completed special training at the University of Washington in Seattle. He has practised orthodontics in the Vancouver area since 1974.

♦♦♦♦♦♦♦♦

The Manitoba Ministry of Health has ratified an agreement which gives an overall eight-per-cent fee increase to dentists who perform insured dental services in hospitals.

The increase, retroactive to April 1, ranges from 10.49 per cent for highly elaborate surgical procedures and 7.6 per cent for other high-volume oral surgical procedures which are performed under the Manitoba Health Insurance Plan. Procedures performed in dentists' offices are not insured.

Dr. Gene Solmundson, President of the Manitoba Dental Association, said his association established a health services commission to meet with the health minister. Negotiations were successful as "they (the government) virtually gave us everything we asked for. And I think our demands were in line," Dr. Solmundson said.

♦♦♦♦♦♦♦♦

"More and more Nova Scotia children are being exposed to good, professional dental care, while at the same time the direct and uninsured costs to their families is being kept under reasonable control."

Speaking at the Nova Scotia Dental Association's annual meeting Provincial Health Minister Gerald Sheehy, said the overall utilization rate for 1981-82 stands at 52 per cent. If children three years of age and under are excluded, the rate increases to 62.7 per cent.

Referring to the federal minister's proposal that direct patient billing for the amount not covered by the N.S. insurance program should be eliminated, Dr. Sheehy said Nova Scotia disagrees with this stand. The province does concur with the federal government "on the need to control the practice," he said.

"I have no wish to threaten the independence of health professionals who wish to practise independently, but I do have a personal and public commitment to ensure that public access to our health programs is neither denied nor impeded because of imposed financial constraints," Dr. Sheehy said.

♦♦♦♦♦♦♦♦

Poor oral hygiene is the usual culprit behind bad breath. Eighty-five per cent of the cases seen by doctors are caused by some form of oral dis-

ease, according to Dr. Kenneth Marshall of the departments of otolaryngology and family practice, McGill University and the Montreal General Hospital.

Most causes of bad breath, he said, are of a local and non-life threatening nature.

But physicians should not routinely assume bad breath is associated only with oral hygiene.

An article in the June 1st edition of the Canadian Medical Association Journal, written by Marshall and colleague Dr. Elhany Attia, warns that halitosis may also be symptomatic of a serious disease or malfunction in various parts of a patient's body.

Halitosis may indicate the presence of some forms of tuberculosis, lung cancer, leukemia, liver failure, syphilis, neurological disorders, a pulmonary abscess, or even a mental disorder.

Doctors have been warned to carefully examine such a patient before shunting him off to the family dentist.

In the article "Halitosis"*, it stated that in the past doctors considered bad breath to be purely symptomatic of a dental problem. In many cases, it may still be. Some of the most frequent causes include dental plaque, caries, gingivitis, stomatitis or periodontitis.

*Attia, E.L., Marshall, K.G. Halitosis, CMA Journal, Vol. 126: 1281, 1982.

Federal government wage restraint guidelines may be stalling the implementation of an interim fee schedule agreement reached last March 26 by the British Columbia Government and the B.C. College of Dental Surgeons.

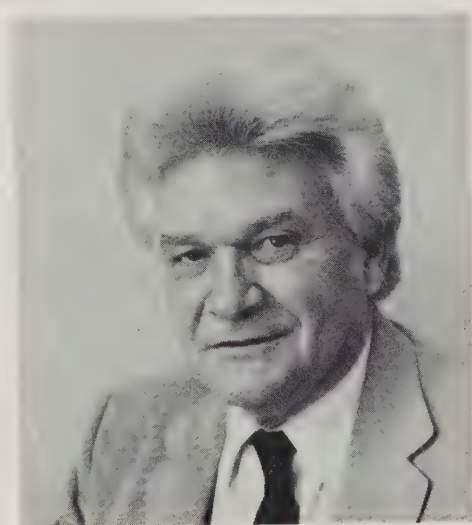
In late July, the College was still waiting for a provincial government decision, which would have given dentists a 12 per cent increase in fees.

Ken Croft, managing director of the B.C. College, said Premier Bill Bennett and Health Minister Jim Nielsen had met recently with representatives of various health groups

with which the government has fee agreements, "to work together to get out of this mess."

He said the government "painted a black financial picture" and it appeared an effort was being made to reduce the 12 per cent settlement to a considerably lower figure.

Mr. B.E. Freamo has been appointed Secretary General of the Canadian Medical Association, the first non-physician to serve in a senior administrative capacity in the Association's 115-year history.



Mr. B.E. Freamo

A native of Renfrew, Ontario, Freamo, 59, graduated from the University of Toronto and served four years as an RCAF bomber-navigator during World War II. He joined the Ontario Medical Association in 1947 where he administered the free medical care plan for Ontario welfare recipients. He also served the OMA as Assistant Secretary of Economics prior to joining the CMA in 1957 as Secretary of the economics department. Freamo was appointed Executive Secretary in 1965.

He succeeds Dr. R.G. Wilson, who resigned last fall.

The Provincial Dental Board of Nova Scotia is examining guidelines in order to formulate a policy for the use of Nitrous Oxide Analgesia in that province.

Dr. S.G. Bagnall, Registrar of the Dental Board, told the CDA Journal

that the policy will "likely be along the lines of Ontario's."

Guidelines for the use of nitrous oxide have been supplied to the Board by the dental associations of Nova Scotia, New Brunswick and Ontario.

The new policy would require any or all persons who use the nitrous oxide procedure to possess a licence from the Board.

The Board is also trying to develop a procedure to determine "exactly how a specific individual receives the necessary certification," according to a report from the Nova Scotia Dental Association.

Dr. Howard Tile of Don Mills, Ontario has been elected President of the Ontario Society of Orthodontists for 1982-83. He succeeds Dr. Bryan Smith, London, who assumes the past-president's position.

Others elected to the association are: Dr. Malcolm Yasny, Toronto, as vice-president; and Dr. Brian Hurd of Burlington as secretary-treasurer.

Walter J. Arnsby is the new Registrar for the Governing Board of Dental Technicians. A dental technician for more than 30 years, Arnsby served with the Royal Canadian Dental Corps for 20 years and became chief technician at the Faculty of Dentistry, University of Toronto in 1968.

When a tax already painfully familiar to most Canadians loomed as a possibility in Washington, American Dental Association President Robert Griffith informed his membership, and asked them to appeal to the United States Senate Committee considering the proposal. The U.S. tax would be levied against employees for employer-paid health benefits that exceed \$150 a month for family coverage and \$60 a month for single employees. The measure at that point had not yet been introduced in Congress, but it had the support of some influential members. The letter-writing response has been good, an ADA official said.

CDA Resource Centre/Le Centre de documentation

COMMUNITY DENTISTRY AND PREVENTIVE DENTISTRY

Copies of the following articles are available at no charge from the library. Original abstracts which were included with the references are provided below. This bibliography was generated with the help of MEDLARS, a computerized information retrieval system for the health sciences field, which has been operational at the library since February 1982, and is at the disposal of all members.

COMMUNITY DENTISTRY:

1. Cowley, G.C. *The management of periodontal disease: community care*. British Dental Journal, v.151, no.9, Nov.3, 1981, p.306.
2. DiPasquale, C. and Thiam, C.T. *Evaluation of community dental health agents (C.D.H.A.) after 8 months of field work*. (translated title — article in French, titre traduit — article en français). Odontostomatologie tropicale, v.4. no. 3, Sep. 1981, pp.131-140.
3. Green, A.G. *The representation of dental officers working for area health authorities*. British Dental Journal, v.149, no.2, Jul.15, 1980, pp.59-61.
4. Haugejorden, O. and Heloe, L.A. *Fluorides for everyone: a review of school-based or community programs*. Community Dentistry and Oral Epidemiology, v.9, no.4, Aug. 1981, pp.159-169.
5. Hunter, E.L. and Rossman, P.P. *Baccalaureate dental hygiene graduates' perceptions of community dental health employment*. Journal of Public Health Dentistry, v.40, no.2, Spring 1980, pp. 134-140.
Abstract: "A survey was conducted on 352 University of Iowa baccalaureate dental hygiene graduates to determine the percentage

of graduates that had been employed in community dental health, the percentage that were interested in community dental health employment, and the respondents' perceptions of community dental health employment as it related to the dental hygienist. Specific findings of the study included: 1. Less than 15 per cent of the respondents had been employed in community dental health. 2. Nearly 40 per cent of the respondents were interested in community dental health employment. 3. Subjects were more opinionated and had more positive impressions of the intrinsic factors than of the extrinsic factors that affect the dental hygienist's employment in community dental health. 4. Subjects who were interested in and/who had been employed in community dental health had significantly greater positive impressions of community dental health employment than those not interested."

6. Koot, A.C. *Power-sharing: implications for the dental hygiene educator*. Educational Directions for Dental Auxiliaries, v.6, no.1, Mar. 1981, pp.5-8.
7. Lotxkar, S. *Community dentistry: a review of the literature on prevention of dental caries (1978-81)*. Florida Dental Journal, v.52, no.3, Fall 1981, pp.17-19, 41.

DENTISTERIE SOCIALE ET PRÉVENTIVE

On peut se procurer sans frais à la bibliothèque le texte des articles ci-dessous. Le cas échéant, nous avons repris le résumé qui accompagnait la référence. Cette bibliographie a été dressée grâce à MEDLARS, un système automatisé de recherche documentaire sur les sciences de la santé que la bibliothèque exploite depuis le mois de février 1982, et qu'elle met au service de tous les membres.

8. Payne, A.G. *Dental Services in the community*. Midwife, Health Visitor and Community Nurse, v.17, no.5, May 1981, pp.190-191.
9. Rise, J. and Haugejorden, O. *Monitoring and evaluation of results of community fluoride programs in Norway during the 1960's and 1970's*. Community Dentistry and Oral Epidemiology, v.8, no.2, Apr. 1980, pp.79-83.
Abstract: "The purpose of this paper was to report on the introduction, functioning and results of community fluoride programs in Norway during the 1960's and 1970's. Data on the treatment carried out in the School and Public Dental Services were available in official publications. Information on systematic community topical fluoride programs for priority groups was collected by postal questionnaire from all school and public dental officers. Nine variables were described and used to construct a correlation matrix."
10. Sheiham, A. *The role of academic departments of community dental health*. Odontostomatologie tropicale, v.4, no.3, Sep. 1981, pp. 159-164.
11. Stein, M.I. and all. *The Kurtzman Community Dental Health Ideology Scale with students in a*

combined degree (AB — DDS) program, *Perceptual and Motor Skills*, v.54, no.1, Feb. 1982, pp. 195-200.

12. Valentine, A.D. *A community approach to the prevention of dental disease in the children of developing countries*. *International Dental Journal*, v.31, no.1, Mar. 1981, pp.23-28.

Abstract: "Even in developed Western countries in the ready availability of sophisticated restorative dentistry has been relatively unsuccessful in reducing the prevalence of dental disease. It is therefore totally wrong to seek to impose a similar structure of dental care in the developing countries with their shortages of wealth, communications and trained personnel. Instead, the emphasis must be on education and the application of preventive methods by relatively simply trained personnel working with the support and under the guidance of a few fully trained dentists."

13. Wasserman, B.S. and all. *A one-day-a-week extramural experience for senior students in community dentistry*. *New York State Dental Journal*, v.46, no.9, Nov. 1980, pp.570-576.

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1. Armstrong, W.D. *The pattern of scientific research*. *Ohio Dental Journal*, v.55, no.11, Nov. 1981, pp.43-46.

2. Bakdash, M.B., Smith, Q.T. and Keenan, K.M. *Minnesota's awareness of various aspects of preventive dentistry: a three-year study*. *Northwest Dentistry*, v.60, no.6, Nov.-Dec. 1981, pp.293-297.

3. Bernier, J.L. *The dentist as an obstacle — a philosophy*. *International Journal of Orthodontics*, v.19, no.2, Jun. 1981, pp.22-26.

4. Boraz, R.A. *Preventive dentistry for the pediatric patient*. *Issues in*

Comprehensive Pediatric Nursing, v.5, no.2, Mar.-Apr. 1981, pp.89-97.

5. Bradley, S. and all. *The role of the preventive team in a National Health Service practice*. Part 1. *Dental Health*, v.20, no.4, 1981, pp.14-17, 20-21.

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7. Deatricks, D.A. and Sorg, J.D. *Generating superintendent support for school preventive dental programs*. *Journal of School Health*, v.52, no.1, Jan. 1982, pp.46-49.

8. DiAngelis, A.J. and all. *Dental needs in children of Mexican-American migrant workers*. *Journal of School Health*, v.51, no.6, Aug. 1981, pp.395-399.

9. Dolinsky, H.B. and all. *A health systems agency and a fluoridation campaign*. *Journal of Public Health Policy*, v.2, no.2, Jun. 1981, pp.158-163.

10. Edwards, R.M. *A national strategy for prevention. A general dental practitioner's personal view*. *British Dental Journal*, v.151, no.2, Jul.21, 1981, pp.43-44.

11. Gelbier, S. and Hopes, I. *The design and use of portable dental equipment for preventive care*. *Journal of the International Association of Dentistry for Children*, v.12, no.1, Jan. 1981, pp.9-16.

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transactional communication to preventive dentistry. (Part 2). *The Compendium of Continuing Education in Dentistry*, v.2, no.4, Jul.-Aug. 1981, pp.227-229.

14. Hodge, H.C. *The role of health education in the prevention of dental disease*. *Royal Society of Health Journal*, v.101, no.5, Oct. 1981, pp.206-209.

15. Hugoson, A. and Koch, G. *Development of a preventive dental care programme for children and adolescents in the county of Jonköping 1973-1979*. *Swedish Dental Journal*, v.5, no.4, 1981, pp.159-172.

Abstract: "Dental research in the last two decades has created a basis for understanding the etiology, prevention and treatment of dental diseases. As a consequence, particular interest has been focused on the effect of prophylactic measures, efficiently organized and carried out, for various groups of individuals. However, it has proved difficult to organize systematic integrated preventive dental care for large parts of the population. The present paper describes in detail the development of integrated preventive dental care for children and adolescents in the County of Jonköping, Sweden, from 1973 to 1979."

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- approach. Virginia Dental Journal, v.58, no.2, Apr. 1981, pp. 16-21.
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 21. Rice, D.P. and all. *Public policy options for better dental health.* Journal of Dental Education, v. 45, no.11, Nov. 1981, pp.746-751.
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 24. Schicke, R.K. *Prevention and the demand for dental care in an international perspective.* International Dental Journal, v.31, no.4, Dec. 1981, pp.320-327.
Abstract: "Organizational patterns of preventive services aimed at stimulating dental health education and hygiene in the young are differently realized in various countries. The priority allotted to dental care within total health services differs in each society. Differences in allocation of responsibility for dental health are reflected in the proportion of co-payment costs borne by the individual. Low perceptions of need by individuals may cause different backlogs of professionally determined need which influence the supply of care and ensuing costs. This is reflected in various levels of expenditure for dental care within the health sector and in the level of spending on various types of dental services."
 25. Sheiham, A. *The role of health education in reducing sugar consumption,* New Zealand Dental Journal, v.77, no.348, Apr. 1981, pp.49-56.
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Nouvelle entente entre le gouvernement du Québec et l'ACDQ

À la fin de juillet, une entente a été conclue entre le gouvernement du Québec et l'ACDQ touchant les réductions proposées pour le régime provincial d'assurance dentaire à l'intention des enfants. Cette entente est entrée en vigueur le 9 août.

Après avoir négocié avec l'ACDQ, le gouvernement a quelque peu modifié ses décisions qui auraient entraîné, avait-on estimé, une économie de 28 millions de dollars pour le Ministère de la santé du Québec.

Selon le Dr I. Margolese, administrateur de l'ADC, les membres de l'ACDQ se sont réunis le 17 juillet et "tous ont accepté l'ensemble des propositions."

"Les quelque 400 dentistes" présents, a-t-il dit, ont jugé que l'entente "n'était pas mauvaise" parce que tous les services, sauf les soins préventifs, seront offerts gratuitement aux enfants jusqu'à l'âge de 12 ans. Ces services seront administrés par des hygiénistes dentaires dans les écoles et d'autres endroits publics.

Le gouvernement "engagera 300 hygiénistes" à cette intention, a déclaré le Dr Pierre-Yves Lamarche, directeur général de l'Ordre des dentistes du Québec. Ces hygiénistes "verront des enfants qui, autrement, ne rendraient jamais visite au dentiste. C'est bien. C'est là une réelle amélioration."

L'administrateur de l'ADC, le Dr Laporte a déclaré que, suivant la nouvelle entente, les enfants de 12 à 15 ans auront toujours droit à des services de prévention.

Ceux qui sont âgés de 13 à 16 ans auront droit aux examens, aux radiographies, aux services préventifs et à la consultation. "Cependant, les obturations ou les extractions ne seront pas couvertes," a dit le Dr. Laporte.

Les honoraires pour les examens de rappel couvriront les radiographies. Le nombre de celles-ci sera laissé à la discrétion du dentiste.

De l'avis du Dr Margolese, les parents qui sont protégés en vertu d'un régime d'assurance dentaire privé, pourront être indemnisés pour les services rendus aux enfants qui ne sont pas couverts par le régime provincial.

Le Dr Claude Chicoine, président de l'ACDQ, agissait comme président du Comité des négociations.

Augmentation des honoraires

D'après la nouvelle entente, les honoraires des dentistes qui participent au régime provincial seront augmentés de 11,3 pour cent.

Selon l'ACDQ et l'ODQ, le gouvernement du Québec inviterait peut-être les hygiénistes dentaires à signer des ententes particulières pour certains

services prévus par le régime d'assurance dentaire.

Les groupes dentaires ne cachent pas leur inquiétude, puisqu'on s'écarterait ainsi de la procédure habituelle suivant laquelle seuls les dentistes et les médecins peuvent conclure des ententes avec le gouvernement.

Le gouvernement semblerait disposé à "suivre l'exemple de la Saskatchewan," de dire le Dr Lamarche. Dans cette province, le gouvernement a conclu des ententes particulières avec les hygiénistes environ 15 ans passés.

Pour le moment cependant, cette inquiétude est injustifiée. En effet, la nouvelle entente conclue entre l'ACDQ et le gouvernement respecte le règlement touchant le droit de signer.

Vains efforts de l'ODQ

Récemment, l'Ordre des dentistes du Québec contestait une décision du gouvernement provincial qui, suivant la nouvelle politique de santé dentaire, permet aux hygiénistes de remplir des fonctions ordinairement réservées aux dentistes. Malheureusement, de dire le directeur général de l'ODQ, le Dr Pierre-Yves Lamarche, "nous croyons avoir abouti à une impasse."

"Nous avons écrit au gouvernement," a-t-il ajouté, "et nous y avons envoyé une délégation. Le gouvernement a tout ignoré."

Des conseillers juridiques sont à étudier l'affaire pour déterminer si l'ODQ devrait poursuivre le gouvernement en justice, étant donné que cette transmission des fonctions constitue "un danger pour le public."

"Seuls les dentistes ont le pouvoir de transmettre ces fonctions," de préciser le Dr Lamarche. Le gouvernement n'a pas ce droit. Aussi ces nouvelles dispositions sont-elles "nullement acceptables pour les dentistes."

Au reste, "presque tous les dentistes de la province," note-t-il avec fierté, ont démontré "qu'ils respectent la position prise par l'ODQ."

Le Dr Lamarche faisait allusion au deuxième envoi d'un formulaire invitant les dentistes du Québec à s'inscrire en faux contre la décision du gouvernement et à donner leur appui à l'ODQ. À la fin de juillet, plus de 2 000 formulaires avaient été signés et retournés à l'ODQ.

Réglementation professionnelle

L'ODQ s'inquiète de l'attitude du gouvernement québécois qui prétend pouvoir réglementer les fonctions des professionnels faisant partie d'une société juridiquement constituée au Québec.

Tard en juillet, un conseil inter-professionnel était créé pour faire front commun et combattre cette ingérence du gouvernement.

Le but des dentistes et des autres groupes professionnels sympathisants est de convaincre le gouvernement que l'Office des professions excède ses droits.

Pénurie de fluorure: crise de l'industrie des fertilisants chimiques dont il dérive

Un ralentissement de la production de l'acide hydrofluosilicique (HFS), produit dérivé d'un fertilisant à base de phosphate et servant à fluorer l'eau des collectivités, a entraîné une pénurie de fluorure au Canada et aux États-Unis.

La rareté de l'argent, les taux d'intérêt élevés et la hausse des prix ont amené les cultivateurs à réduire de façon draconienne leurs achats en fertilisants chimiques. Bill Hamilton, secrétaire exécutif associé de la Fédération canadienne de l'agriculture, a déclaré au Journal: "Tout nous indique que les cultivateurs canadiens trouvent les prix trop élevés et qu'ils ont, au printemps, utilisé beaucoup moins de fertilisants à cause de la situation économique."

Les stocks de fertilisants s'accumulent dans les usines et les entrepôts et les compagnies ralentissent la production ou ferment leurs portes temporairement jusqu'à ce que la demande reprenne.

Les municipalités qui se servent du HFS pour fluorer leur eau potable doivent trouver de nouvelles sources d'approvisionnement ou réduire leur taux de fluor.

Fabricants et distributeurs prévoient que la rareté de HFS durera au moins jusqu'à l'automne. Ils s'attendent à ce que l'ensemencement du blé d'hiver entraîne alors une augmentation de la demande en fertilisants chimiques.

Le Centre de contrôle des maladies qui est situé à Atlanta (Georgie) et maintient l'attention des Américains en matière de fluoration, prévoit qu'aux États-Unis la rareté de fluorure durera jusqu'en 1983. Thomas Reeves, spécialiste du centre, rappelle qu'il y a eu un certain "fléchissement" en 1973, mais "on ne peut le comparer à la situation très inusitée de cet été."

Dès la mi-juillet, les principaux fabricants américains de HFS avaient

ou réduit leur production ou fermé leurs portes.

En conséquence, certaines municipalités qui dépendent du HFS peuvent être contraintes de recourir à d'autres méthodes de fluoration en se servant du fluorure de sodium qui n'est pas touché par le ralentissement de la production. Ce n'est pas un produit dérivé et il est fabriqué selon un procédé différent, de dire Reeves.

Dès le milieu de l'été, une dizaine des grandes municipalités américaines ne pouvaient plus s'approvisionner qu'à la semaine, et beaucoup d'autres, y compris Seattle et Washington, avaient cessé de fluorer leur eau potable.

Difficultés au Canada

Au Canada, les villes de Winnipeg et Edmonton ont fait savoir qu'elles avaient de la difficulté à maintenir le taux normal de HFS.

Le Dr Leo Konyk, directeur des services dentaires de Winnipeg, a déclaré au Journal, à la fin de juillet, que son fournisseur régulier, Chemtech Industries Inc., de St. Louis, ne pourrait répondre qu'à 50 p. 100 des besoins en HFS, et cela "pour une période indéterminée à compter du mois d'août."

Le Dr Konyk s'attend à ce que la pénurie dure environ quatre mois. Si alors elle ne reçoit pas son approvisionnement normal de HFS, la ville devra y suppléer par du fluorure de sodium que lui fournira Prairie Industrial Chemicals. Le Dr Konyk espère ne pas avoir à prendre une telle mesure, "parce que cela coûterait alors à la ville de Winnipeg quatre fois plus cher" que de fluorer l'eau avec du HFS liquide. Il faudrait en effet acheter et installer l'équipement nécessaire pour dissoudre le fluorure de sodium avant de le mélanger liquide au HFS.

Le Dr Konyk a précisé que le département de biologie buccale de l'Université du Manitoba avait conseillé à

la ville d'utiliser "un autre produit" si la pénurie durait plus de six mois.

Aussi grave qu'aux É.-U.

Selon les principaux fournisseurs de HFS au Canada, la pénurie sera tout aussi grave au pays qu'aux États-Unis.

Cominco, le principal fournisseur de la Colombie-Britannique et de l'Alberta, ainsi que d'une partie de l'Ouest américain, y compris Seattle, a déjà réduit les approvisionnements des municipalités jusqu'à la reprise de la production de son usine prévue pour le mois d'août.

Lorsque nous lui avons parlé à la fin du mois de juillet, Jack Merryfield, gérant des ventes des produits chimiques, nous a expliqué que Cominco avait suspendu la production du HFS quand elle a fermé ses hauts fourneaux pour entretien. Et cela, parce que la demande était faible et les prix bas. "Nous avons accumulé des réserves avant la fermeture pour aider les municipalités le mieux possible. Néanmoins, Edmonton et Seattle devront peut-être se passer de HFS pendant une semaine. Nous avons tenté d'en obtenir ailleurs, mais la pénurie est générale."

La situation n'est pas meilleure chez CIL Inc., de Willowdale (Ontario), le principal fournisseur de HFS dans l'Est du Canada.

À la mi-juillet, l'usine avait cessé sa production pour trois semaines.

Bruno Lenarduzzi, gérant de la production, a déclaré, à la mi-juillet: "Cela ne va pas trop bien ici depuis quelques semaines." CIL a du "chercher de l'approvisionnement partout aux États-Unis." Mais, en vain.

"Nous maintenons la réserve des municipalités, mais cela devient de plus en plus difficile, il ne fait aucun doute. Je crois que la situation s'améliorera à l'automne," de dire Lenarduzzi.

(Suite page suivante)

Réunion du CRCDC



Le Collège royal des chirurgiens dentistes du Canada a tenu son assemblée annuelle le 8 mai dernier, à la Hart House de l'Université de Toronto. Sur la photo, on aperçoit les Drs Paul Jean, Alexander Bowman, J. Anderson et F.L. Zarb, membres du collège et prothésistes.

Lors de la réunion annuelle du Collège royal des chirurgiens dentistes du Canada, le 8 mai dernier, à l'Université de Toronto, le Dr Robert E. Moyers s'est vu décerner le titre de membre honoraire du collège. Le Dr Moyers est un orthodontiste et il est

reconnu comme une autorité internationale sur la croissance et le développement humain.

Le Dr J.H.P. Main, président du CRCDC, a également conféré, après examen, le titre de membre du collège

aux Drs D.C. Bardsley, Alexander Bowman, L.A. Chapnick, P.L. Cyr, Daniel Forget, Aron Gonshor, B.J. Lahiffe, C.A. McCulloch, K.R. Morley, Colin Price, R.G. Stapleford et D.K. Yip. Par ailleurs, 93 spécialistes ont reçu le même titre.

(Pénurie de fluorure: suite)

Vic Mudie, représentant des ventes spécialisées à la direction générale des produits chimiques de CIL, a précisé que sa compagnie ne produisait que la moitié du HFS fourni aux municipalités, le reste venant d'autres sources en Amérique du Nord.

"La situation est serrée, dit-il, je ne le nie pas. Mais nous pouvons encore répondre à la demande de nos clients."

Mudie, ainsi que Marcel Samson, représentant des ventes pour la région d'Ottawa et la province de Québec, ont ajouté qu'ils avaient communiqué

avec tous leurs clients, 12 municipalités du Québec et certaines villes telles que Toronto et Ottawa, dès le début de la crise, et s'étaient informés de leur inventaire.

'Nous ne prévoyons pas de problèmes'

M. G.A. Missingham, chef de la division des eaux municipales à la direction du contrôle de la pollution au ministère ontarien de l'environnement, a déclaré au Journal que la CIL lui avait fait savoir au mois de juillet qu'elle serait en mesure de répondre à la demande des municipalités.

"Il y avait certaines appréhensions

(à ce moment-là), mais nous ne prévoyons pas de problèmes," dit-il.

Selon Jim Brown, directeur général de l'Institut canadien des fertilisants, les producteurs canadiens de phosphate sont dans une meilleure position que leurs homologues américains, parce qu'ils ont été forcés de réduire leur production de 15 p. 100, alors qu'aux États-Unis la baisse a atteint 25 p. 100 en moyenne.

Lloyd Bowen, agent de fluoration de l'Association dentaire canadienne, a envoyé une note aux associations dentaires provinciales les prévenant de l'actuelle pénurie de fluorure.

Que faire si on vous poursuit en justice? — CDSPI

Suivant les statistiques, les risques d'être poursuivi en justice pour faute professionnelle au cours de votre carrière s'élèvent à 40 pour cent. Aussi est-il sage de savoir quoi faire, le cas échéant.

Gérée par les CDSPI au nom de l'ADC et de toutes les associations provinciales, sauf celle de l'Ontario, l'actuelle politique de l'Association dentaire canadienne touchant les fautes professionnelles contient certaines règles qu'il est utile de connaître.

Dès qu'il se produit un accident ou un événement qui, à votre avis, pourrait raisonnablement donner suite à une réclamation pour faute professionnelle, vous devez en aviser immédiatement votre arbitre en assurance. Si une réclamation est faite contre vous, vous devez, sans délai, communiquer à votre assureur tout avis, toute demande — qu'ils soient écrits ou verbaux — ou tout acte légal qu'on vous aura remis.

Vous devez également collaborer avec lui de façon générale, mais surtout en le secondant, en obtenant ou en fournissant des preuves, en assistant aux audiences ou au procès et en faisant valoir tout droit que vous pouvez avoir sur une autre personne afin de faire diminuer la réclamation. Par ailleurs, l'assureur aura besoin de votre consentement pour assumer la responsabilité en votre nom. Celui-ci pourra négocier un accord sans admettre aucune responsabilité "sous toutes réserves."

Vous ne devez vous reconnaître coupable pour aucune réclamation possible, sinon la réclamation sera faite à vos dépens.

Toutefois, il y a loin de la théorie à la pratique. Dès que vous apprenez qu'une réclamation est faite contre vous ou qu'il se produit un événement pouvant entraîner une, avisez-en immédiatement le bureau local de la firme d'arbitrage en droit d'agir dans

votre province. (À la fin du présent article se trouve une liste des firmes d'arbitrage et on vous conseille de noter celle de votre région.) L'avis doit être donné sans délai par téléphone d'abord, puis confirmer par écrit. Ensuite, vous conserverez tous les écrits ayant trait à l'incident en question et vous les rangerez dans un endroit sûr afin que l'arbitre en assurance puisse les réviser sur demande.

Quand vous avisez l'arbitre en assurance, vous laissez entendre que vous lui accordez la permission de s'occuper des négociations en votre nom. Dès lors, celui-ci devrait vous décharger de l'affaire et, le plus rapidement possible, régler au mieux la réclamation avec la personne plaignante. Votre travail est d'exercer votre profession, non de vous mêler des négociations. Toutefois, vous serez tenu au courant de leur développement. Si l'arbitre en assurance éprouve des difficultés et doit recourir aux services d'un conseiller juridique, vous serez avisé de la façon dont ce dernier s'occupera de l'affaire.

Dans certains cas, l'avis de réclamation possible exige immédiatement les services d'un conseiller juridique. Comme le temps manque alors pour passer par la filière habituelle, vous devez prendre un conseiller juridique vous-même. Quand le moment de crise est passé, la réclamation peut être traitée comme à l'ordinaire. Et si elle est couverte par la police d'assurance et que les conditions de celle-ci sont remplies, l'assureur se chargera des frais de justice que vous aurez encourus entre-temps.

Ce qui précède s'applique aux réclamations pour faute professionnelle. Cependant, il surgit entre le dentiste et le patient d'autres problèmes comme des différends touchant les honoraires ou les services rendus. Ces problèmes ne constituent pas des fautes professionnelles et, au lieu de l'assu-

reur, il faut voir le comité de révision provincial ou local. Bien que les affaires qui ressortissent d'un tel comité puissent devenir des réclamations pour faute professionnelle, l'assureur admet que les activités de ce comité ne nuiront aucunement à votre statut de personne assurée. Toutefois, avant d'accepter l'accord suggéré par un comité, vous devez exiger que la personne plaignante signe un acte vous libérant de toute autre responsabilité. Ne l'oubliez pas, *vous êtes toujours tenu d'aviser l'arbitre en assurance de tout événement qui, raisonnablement, peut entraîner une réclamation prévue par le régime d'assurance.*

Si vous gardez en mémoire ces directives et vous conduisez conformément, vous risquez peu d'avoir des ennuis touchant le rapport des réclamations. Que vous fassiez appel ou non à un comité de révision, il vaut mieux pécher par excès de prudence et aviser l'arbitre en assurance dans tous les cas. On peut lui demander de surveiller l'affaire seulement.

Le but du présent article est d'expliquer ce qu'il convient de faire quand une personne participant au régime d'assurance subventionné par l'ADC doit répondre à une réclamation pour faute professionnelle. Rien n'est changé aux conditions du régime et vous devez vous y conformer scrupuleusement pour conserver votre garanti. Quant à ceux qui sont assurés en vertu d'un autre régime, ils feraient bien de lire attentivement leur police d'assurance afin de savoir exactement comment procéder dans la même situation.

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Entente conclue à Terre-Neuve

À la mi-juillet, l'Association dentaire de Terre-Neuve et le gouvernement de la province ont conclu une entente qui rétablit la deuxième visite annuelle au Programme dentaire pour les enfants.

En mai, le ministre de la Santé, M. Wallace House, avait annoncé que le gouvernement se proposait, dans un effort pour réduire les dépenses du budget, d'éliminer cette deuxième visite dans l'espoir de réaliser une économie annuelle de 700 000\$.

De l'avis du ministre, cette deu-

xième visite n'était pas essentielle et ne valait pas son prix.

Compromis

Selon le Dr Ramon Windsor, président du Comité des négociations de l'ADTN, l'entente est "un compromis accepté par les dentistes et le gouvernement."

La nouvelle politique prévoit des traitements de prophylaxie et au fluorure ainsi qu'un examen de l'occlusion chaque année.

Toutefois, "le nombre des radiographies est réduit. De plus, les dentistes ont diminué leurs honoraires d'un dollar," a déclaré le Dr Windsor.

Par ailleurs, a-t-il annoncé, on établira une division distincte du régime provincial d'assurance dentaire qu'on appellera le Service public de santé et de prévention dentaires.

Cette division prévoit cinq régimes géographiques avec chacune un hygiéniste dentaire qui sera chargé d'un programme de prévention.

Un regard étranger sur la dentisterie

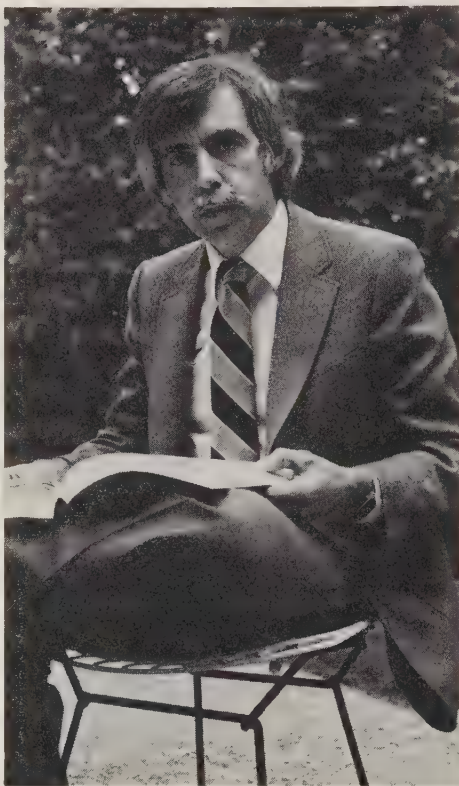
Le Dr Jean-Louis Fortin est doyen adjoint de l'Ecole dentaire de l'Université de Montréal. Pourtant, il n'est pas dentiste.

Universitaire, sociologue, professeur et administrateur, le Dr Fortin détient une maîtrise en administration et un doctorat en éducation. Il est la seule personne au Canada qui, sans être dentiste, occupe un tel poste dans une école dentaire.

À son avis, comme il s'intéresse avant tout à l'éducation, le fait qu'un "étranger objectif" étudie de près la profession dentaire ainsi que le système d'éducation dans les écoles dentaires, constitue un avantage.

Le Dr Fortin s'est joint à l'Ecole dentaire en tant qu'adjoint administratif après avoir travaillé dans l'assurance et avec les conseils scolaires de la région de Montréal.

Il vient de publier sa thèse de doctorat intitulée: "L'Impact de la formation universitaire sur les modes de pratique dentaire." Il y étudie les fonctions traditionnelles de l'université et les conséquences qui en découlent pour l'enseignement professionnel en général et pour l'enseignement



Le Dr Jean-Louis Fortin

dentaire en particulier. Selon lui, la tendance à la spécialisation dans les universités a accentué la division entre les disciplines ainsi qu'entre la profession dentaire et les autres professions.

En faveur des pratiques collectives

À l'aide d'un questionnaire qu'il a distribué à 2 300 dentistes du Québec, le Dr Fortin a découvert qu'environ 40 pour cent d'entre eux ont des pratiques privées. Bien que ce pourcentage soit le plus bas au Canada et aux Etats-Unis, il voudrait le voir diminuer au point où tous les dentistes du Québec et ceux du Canada travailleraient dans des pratiques collectives.

"Seuls des dentistes peuvent évaluer des dentistes," soutient-il. "Si un dentiste travaille seul, personne ne peut l'évaluer." Les pratiques collectives, dit-il, assurent le contrôle de la qualité des services et la révision professionnelle. Le patient est donc satisfait.

Dentistes heureux

L'enquête a révélé au Dr Fortin que, sur 1 044 dentistes interrogés, 89 pour cent ont déclaré qu'ils étaient contents du choix de leur carrière et que, si tout était à refaire, ils la choisiraient à nouveau. À l'exception du Utah, précise-t-il, c'est là le plus haut pourcentage de réponses positives obtenu en Amérique du Nord.

VOUS QUI ÊTES UNE PERSONNE CULTIVÉE...

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en bref —

Les dentistes et les médecins sont au nombre des professionnels auxquels le fisc canadien a apporté un certain soulagement, lors de la révision, le 31 mai, des règlements touchant la dépréciation des biens imposables.

Avant le budget du 12 novembre 1981, petits instruments, couteaux et uniformes pouvaient être dépréciés entièrement dans l'année de leur acquisition. Le budget du mois de novembre n'a permis que six mois de dépréciation dans la même année.

Depuis le 31 mai 1982, ces articles sont soustraits du projet original du mois de novembre.

On permet donc de nouveau de déprécier entièrement dans l'année de leur acquisition des articles tels que matrices, gabarits, modèles, moules ou formes, ainsi qu'instruments médicaux ou dentaires, acquis pour moins de 100 \$ avant le 26 mai 1976 ou pour moins de 200 \$ après le 25 mai 1976; linges ou instruments acquis pour moins de 100 \$ avant le 26 mai 1976 ou pour moins de 200 \$ avant le 25 mai 1976; uniformes ou pièces de machines servant à trancher ou à façonner.

(Ces articles se trouvent dans la liste des biens de classe 12, partie II des règlements de l'impôt sur le revenu.)

Tout comme les autres Canadiens avisés, les étudiants dentaires savent profiter d'une aubaine quand elle se présente.

Et certes, se joindre à l'ADC constitue une excellente affaire.

Pour 12\$ par année, les membres étudiants de l'ADC reçoivent le Journal mensuel et le bulletin étudiant, sont éligibles au régime d'assurance pour non diplômés et sont représentés auprès du Conseil des affaires étudiantes et du Conseil d'administration de l'ADC. De plus, lorsqu'ils sont diplômés, ils ont droit à un régime

d'assurance gratuit et sont automatiquement membres de l'ADC pour six mois.

Les statistiques le prouvent. L'an dernier, 94,5 pour cent des étudiants dentaires non diplômés se sont joints à l'ADC. Il est clair que c'est une excellente aubaine. À vous, étudiants, de vous en prévaloir.

Le Dr Ronald J. Markey, de Richmond (Colombie-Britannique), a été élu président du Collège des chirurgiens dentistes de sa province pour l'année 1982-1983.

Les vice-présidents sont les Drs Serge Vanry et John Silver, de Vancouver. Le trésorier, le Dr Jack Penzer, de Langley, a été réélu à son poste par acclamation.

Parmi les sept candidats possibles, on en a choisi cinq qui agiront comme membres extraordinaires auprès du Conseil. Ce sont les Drs Al Floyd (Kamloops), Robert Steed (Nelson), Julian Thorsness (Prince George) et William Walter (Vancouver) ainsi que M. Dick Thorpe (Burnaby).

Le Dr Markey fait partie du Conseil depuis 1979. Il est l'un des trois représentants du Collège de la Colombie-Britannique auprès du Conseil d'administration de l'Association dentaire canadienne.

Diplômé de la Faculté de dentisterie de l'Université McGill en 1969, il a suivi un cours de perfectionnement spécial à l'Université de Washington, à Seattle. Depuis 1974, il se spécialise en orthodontie dans la région de Vancouver.

Le Ministère de la Santé du Manitoba a ratifié un accord concédant une augmentation générale de huit pour cent aux dentistes qui administrent, dans les hôpitaux, des soins dentaires garantis.

Ayant un effet rétroactif au 1^{er} avril, l'augmentation est de l'ordre de

10,49 pour cent pour les interventions chirurgicales hautement élaborées et de 7,6 pour cent pour les interventions chirurgicales buccales qui sont pratiquées couramment et garanties en vertu du Régime d'assurance-maladie du Manitoba. Les opérations pratiquées dans un cabinet dentaire ne sont pas couvertes.

Le Dr Gene Solmundson, président de l'Association dentaire du Manitoba, a déclaré que l'association avait établi une commission sur les services de la santé pour rencontrer le ministre de la Santé. Les négociations ont porté fruit. Le gouvernement "a accédé pratiquement à toutes nos demandes," de dire le Dr Solmundson. "Et je pense que nos demandes étaient raisonnables."

"De plus en plus d'enfants de la Nouvelle-Écosse reçoivent des soins dentaires professionnels. En outre, les coûts directs et non garantis imposés à leurs parents pour ces soins restent raisonnables."

C'est ainsi que s'exprimait le ministre provincial de la Santé, le Dr Gerald Sheehy, lors de l'assemblée annuelle de l'Association dentaire de la Nouvelle-Écosse. Dans l'ensemble, a-t-il déclaré, le recours aux services dentaires pour 1981-1982 s'élève à 52 pour cent. Si on exclut les enfants de trois ans ou moins, la moyenne est de 62,7 pour cent.

Au sujet de la proposition du ministre fédéral visant à éliminer les factures adressées directement au patient pour les services non couverts par le régime d'assurance-maladie de la Nouvelle-Écosse, la province ne l'a agréée pas, a déclaré le Dr Sheehy. Cependant, elle est d'accord avec le gouvernement fédéral touchant "le besoin de contrôler la pratique."

"Je ne désire aucunement aliéner l'autonomie des professionnels de la santé qui veulent gérer une pratique

indépendante," soutient le Dr Sheeby. "Toutefois, je me suis engagé personnellement et publiquement à assurer que l'accès du public à nos programmes de santé ne soit nullement interdit ou rendu difficile à cause des restrictions financières imposées."

♦♦♦♦♦♦♦♦

La mauvaise haleine est habituellement causée par une pauvre hygiène buccale. Selon le Dr Kenneth Marshall, oto-laryngologiste et médecin de famille à l'Université McGill et à l'Hôpital général de Montréal, dans 85 pour cent des cas examinés par les médecins, la cause d'une haleine fétide est une maladie buccale.

La plupart du temps, affirme-t-il, la cause est localisée et n'est nullement fatale.

Toutefois, les médecins ne devraient pas conclure automatiquement qu'une haleine fétide est due seulement à une mauvaise hygiène buccale.

Dans un article paru dans le numéro du 1^{er} juin du Journal de l'Association médicale canadienne, le Dr Marshall et son collègue, le Dr Elhany Attia, déclarent que la bromopnée peut être le symptôme d'une maladie sérieuse ou d'un dérèglement de l'organisme.

La bromopnée peut être le signe d'une tuberculose, d'un cancer du poumon, d'une leucémie, d'une insuffisance du foie, d'une syphilis, de désordres neurologiques, d'un abcès pulmonaire ou même d'un désordre mental.

Les médecins feraient donc bien d'examiner attentivement les patients qui ont l'haleine fétide avant de les envoyer voir le dentiste.

D'après l'article en question*, les médecins considéraient autrefois que la mauvaise haleine dépendait uniquement d'un problème dentaire. Ce peut être vrai dans plusieurs cas et, alors, les causes les plus fréquentes sont la plaque dentaire, les caries, la

gingivite, la stomatite ou la parodontite.

*Attia, E.L., et K.G. Marshall, Halitosis, Journal de l'AMC, vol. 126, p. 1281.

♦♦♦♦♦♦♦♦

Monsieur B.E. Freamo a été nommé secrétaire général de l'Association médicale canadienne. C'est la première fois, depuis 115 ans qu'existe l'association, qu'une personne y occupe un poste administratif élevé sans être médecin.

Né à Renfrew (Ontario) et âgé de 59 ans, M. Freamo a fait ses études à l'Université de Toronto. Au cours de la Deuxième Guerre, il a servi pendant quatre ans dans le Corps d'aviation royal du Canada comme pilote de bombardier.

En 1947, il s'est joint à l'Association médicale de l'Ontario où il s'est d'abord occupé du régime provincial d'assurance-maladie pour les assistés sociaux avant de devenir secrétaire adjoint en science économique. En 1957, il passait au service de l'AMC en tant que secrétaire pour la division de science économique et, en 1965, il était nommé secrétaire administratif.

Il succède au Dr R.G. Wilson qui a remis sa démission l'automne dernier.

♦♦♦♦♦♦♦♦

Pour de nombreux Canadiens, l'impôt sur les régimes d'assurance-maladie défrayés par les employeurs est, malheureusement, une dure réalité. De l'avis du président de l'Association dentaire américaine, Robert Griffith, les Américains pourraient bientôt y être confrontés eux aussi. C'est pourquoi il a demandé aux membres de l'association d'écrire au Sénat pour qu'il rejette cette proposition. Les Etats-Unis comptent prélever un impôt sur les régimes coûtant plus de 150\$ pour les familles et 60\$ pour les célibataires. Bien que la proposition n'ait pas encore été soumise au Congrès, elle est appuyée par plusieurs personnes influentes. Cependant, une source officielle de l'ADA révèle que les protestations sont nombreuses.

♦♦♦♦♦♦♦♦

Walter J. Arnsby vient d'être nommé registraire du Bureau des gouverneurs des techniciens dentaires. Denturologiste depuis plus de 30 ans, il a servi pendant vingt ans dans le Corps dentaire royal canadien et a été nommé denturologiste en chef à la faculté de médecine dentaire de l'Université de Toronto en 1968.

Régime d'épargne-retraite de l'ADC

Les valeurs respectives du Régime d'épargne-retraite de l'Association Dentaire Canadienne étaient les suivantes au 31 juillet 1982.

Fonds d'actions ordinaires	\$45.8813
Fonds à revenu fixe	\$28.1830
Fonds garanti	\$23.9132
Fonds de placement	\$10.3018

L'avoir total (valeur marchande) du régime s'élevait à \$28,658,959.

Au 30 juin 1982, les chiffres du mois précédent étaient les suivants:

Fonds d'actions

ordinaires	\$43.9638
Fonds à revenu fixe	\$27.5030
Fonds garanti	\$23.6059
équilibré	\$10.0088

L'avoir total (valeur marchande) du régime s'élevait à \$28,065,692.

Pour de plus amples renseignements, veuillez écrire à l'adresse suivante: Canadian Dental Service Plans Inc., Ste. 600, 2 Lansing Square, Willowdale, Ontario M2J 4Z3, ou appeler le service de renseignements du CDSPI en composant 1-800-268-5418 (497-7171 pour les résidents de Toronto).

Regional Anaesthesia of the Oral Cavity

J. Theodore Jastak,

John A. Yagiela

*C.V. Mosby Company
St. Louis, Missouri
1981
212 pages*

This textbook on local anaesthesia is not the largest, most thorough or best organized one that I have read, but it is one of the most practical volumes on this subject and it's easy to read. The title is worthy of note in that the authors chose to refer to the subject as "Regional Anaesthesia." This is a term commonly employed by medical anaesthetists and, by utilizing it in this book's title, it serves to emphasize the existing relationship between the medical and dental specialties of anaesthesia rather than treating dental anaesthesia as if in isolation.

In the preface, the authors clearly lay out their goals for the book. They state that "this book is designed as a basic instructional text for oral regional anaesthesia. As such, it is primarily directed at students and practitioners of dentistry and dental hygiene... It may also be of interest to certain physicians..." This would, indeed, summarize the target audience. "An attempt has been made to be reasonably thorough without being unnecessarily encyclopedic." Topics better learned from other sources are not needlessly rehearsed.

The book is divided into eight chapters. The first one is "History of regional anaesthesia." If it is less important, it is an interesting and welcome addition to the text, giving the reader some insight into the evolution of the art and science of pain control.

The second chapter is titled, "Review of the peripheral nerve." The anatomic and physiologic features of the various nerve fibres

are clearly presented including the latest theories of impulse transmission along nerve fibres. This is a prelude to understanding the mechanisms involved in local anaesthesia.

The next chapter, "Pharmacology of regional anesthesia," discusses, in a meaningful way, the features and characteristics of the local anaesthetic agents as a group. Mode of action and systemic effects are then covered, as well as other aspects of their pharmacology. The commonly used vasoconstrictor agents are similarly reviewed and compared. The next portion of the chapter compares the various clinical preparations that are in use today for local anaesthesia including a rationale for drug selection.

Chapter four is titled, "Patient evaluation." The actual approach to patient evaluation is covered only briefly and would best be learned from other sources. What is important in this chapter is the section on specific considerations. Specified conditions such as cardiovascular disease, endocrine disorders, drug interactions, etc. are reviewed with specific reference to the implications of using local anaesthetics relative to those conditions.

Chapter five, "Anaesthetic equipment," is a thorough overview of the equipment required for local anaesthetic administration. Proper usage and handling is described as well as pitfalls and peculiarities of the equipment. The reader is guided towards understanding the equipment so as to employ it with maximum effectiveness and minimum risk to the patient. Alternate modes of administration, such as jet injectors, are also discussed.

A usual component of most textbooks on local anaesthesia technique is a chapter on related anatomy. There is no exception here; chapter six is, "Neuroanatomy of

the fifth cranial nerve." In keeping with the rest of the text, this topic is covered effectively and logically using clear, easy-to-understand drawings.

"Techniques of regional anesthesia" is the subject of chapter seven. In the outset of this chapter, patient management is covered, but not in any great depth. Again, this is a topic better learned from references on patient management techniques. Tissue preparation and other considerations pertinent to all injections are discussed. The bulk of this chapter describes all of the common injection techniques that are currently employed including the Gow-Gates technique for mandibular block. Descriptions are straightforward yet comprehensive and include appropriate precautions. Photographs and diagrams are used here to advantage. Following this is a brief review of supplementary injection techniques to be reserved for special circumstances when the more common techniques might fail. A section is devoted to the unique differences related to regional anaesthesia in the child. The chapter concludes with a discussion on "failure to achieve anaesthesia" which will help the clinician better understand any problems he has had with local anaesthetic administration and how to overcome them.

The last chapter of the book is "Complications and side effects." The common as well as less common reactions involving local anaesthetics are reviewed in terms of understanding and prevention. The authors try to convey an appreciation for the significance of the various reactions which are discussed.

This book was reviewed by Alan S. Ross, Associate Professor and Head, Department of Oral Surgery and Anaesthesia, College of Dentistry, University of Saskatchewan.

Biomedical and Dental Applications of Polymers

Charles G. Gebelin
and Frank K. Koblitz

Plenum Press
New York, N.Y.
1981
\$59.50, 492 pages

The diversity, the level of sophistication and the dollar value of polymer products used in clinical practice have increased steadily during the last decade. Commercial and scientific activity in polymer science for health care has also expanded dramatically and symposia in this area are no longer rare. This book was based on such an event: The American Chemical Society's first **Biomedical and Dental Application of Polymers Symposium**, held in March, 1980 in conjunction with its 179th national meeting in Houston, Texas.

The work is well edited and is much more than an assembly of papers on vaguely related subjects which has become the trademark of any recent proceedings. Efforts appear to have been made to increase the scientific content of individual presentations and to organize the material in a more rational format than the original order in which the papers were presented. It includes 35 papers contributed by more than 75 authors. Topics include specialty polymer syntheses, in-vivo materials performance, novel polymer devices, biocompatibility assessment, polymer characterization, drug delivery systems, prospects in dental polymers, mechanical properties of restorative materials and novel dental applications of polymers. Although only about 30 per cent is formally devoted to dental papers, more than 45 per cent seem to have direct relevance to dental research.

Despite the multiplicity of authors, the work is easily read and is uniform in style. Illustrations are lacklustre but, nevertheless, suffi-

ciently clear for the purpose intended. References are extensive and include patents for many papers. However, the layout of the text and the style of chemical formulae which, by necessity, form a large part of the content can be confusing.

The collective undertaking, involving what was originally a large number of heterogeneous concepts, has substance, especially since some of the included data had not been previously published. At any rate, chemically-oriented overviews in dental polymer science are very few and are perhaps essential for further developments in new dental polymer systems.

Specific papers worthy of special mention in the dental sector

include: recent work on bonding of collagen and acrylic polymers; a review on rate-controlled drug delivery systems; two papers on new chemical intermediates for use in dentistry by members of the US National Bureau of Standards, and a well illustrated paper on fiction and wear of dental polymeric composites.

In summary, the book is a contribution to the state-of-the-art and will prove informative to dental specialists including the clinically-oriented teacher. It is, however, of limited usefulness to the clinician.

This book was reviewed by P. Blais, PhD, Division of Medicine, Bureau of Medical Devices, Health and Welfare Canada.

Obituaries

CHRISTIE, Dr. Reginald Pickard: May 24, 1982. Dr. Christie of Courtenay, B.C. was born on August 31, 1893 and graduated from the North Pacific Dental School in 1916. A life member of the CDA, he practised in Cumberland, Courtenay and Comox until his retirement in 1978. In 1964 he was among the few Western dentists to visit China as a clinician.

CLERMONT, Alfred Anselme: July 22, 1982. Dr. Clermont of Edmonton, Alberta was born on January 19, 1888 and graduated from the University of Toronto in 1923. He practised in Edmonton.

LOESER, Dr. Richard C.: November, 1981. Dr. Loeser, born April 15, 1947, graduated from the University of Tennessee in 1970. He was practising in Saskatchewan at the time of his death.

MARKS, Dr. James Theodore: March 6, 1982. Dr. Marks of Nanaimo, B.C. was born on January 17, 1926 and graduated from the University of Alberta in 1953. He practised in Burnaby and Nanaimo, and was an active member of CDA.

McLUHAN, Dr. Winston: July, 1982. Dr. McLuhan, born in 1916, graduated from the University of Toronto in 1951. He made his home in Victoria, B.C.

PARROTT, Dr. Fred Walter: July 9, 1982. Dr. Parrott of Portage la Prairie, Manitoba was born in 1919 in Saskatoon, Saskatchewan. He graduated from the University of Toronto and served in the Canadian Dental Corps during World War II. He was a past president of the Manitoba Dental Association and a Fellow of the International College of Dentists.

Somatopsychics in dentistry

Frederic Vosburg, BA, DDS, FICD
Montreal

Many oral disorders precipitate behavioural disturbances in dental patients. Disfigurement, pain, malaise, impaired function and other physical effects of oral diseases may give rise to emotional reactions such as anxiety, depression, denial, dependence and hostility.^{1,2} These somatopsychic manifestations can distort an accurate diagnosis, influence patient acceptance of proposed treatment, impair cooperative behaviour during treatment and complicate postoperative results.

This partial list suggests that in the treatment of oral pathology, in addition to his responsibility for the patient's physical care, the dentist is also required to identify and manage the patient's emotional needs arising out of somatic dysfunction.

A study of this phenomenon involves an analysis of two factors: (1) the physical effects of oral disorders, and (2) the personality structure of the patients.¹

Oral Disorders

Emotional stresses are induced in the patient by the physical effects of oral disorders resulting in behavioural problems which have clinical significance for the dentist. Disfigurement and pain are used to illustrate this observation.

Disfigurement:

Various oral disorders result in physical disfigurement. They include dental caries and periodontitis leading to tooth loss or mutilation, developmental defects such as enamel dysplasia and dentofacial malformations, neoplasms, excessive tooth abrasion and attrition, and traumatic injuries.

In a society as conscious of physical appearance as ours, these conditions may damage a patient's self-image, lower his self-esteem, jeopardize his ability to meet his social and economic obligations, and provoke feelings of inferiority, depression and withdrawal.^{1,3}

In clinical situations involving the treatment of disfiguring disorders the patient is often markedly motivated to (a) accept stressful and costly therapeutic procedures, and (b) to sustain them with relative equanimity. For example,

he may undergo, without reservation, enervating and expensive oral reconstruction involving teeth with a questionable prognosis; complex and onerous maxillo-facial surgery; lengthy orthodontic correction of dentofacial malformations and fabrication of complicated maxillo-facial prostheses in trauma and cancer cases.

Indeed, the patient may actually request treatment for conditions that are only marginally indicated biologically but which may afford him profound psychological benefits. Examples include the full crown restoration of discoloured, devitalized or heavily abraded anterior teeth; minor orthodontic movement to correct a diastema or slight malpositioning of anterior teeth.⁴

Pain:

Pulpitis, osteomyelitis, tic douloureux, neoplasms, dry sockets, traumatic injuries, pericoronitis and myofascial pain dysfunction syndrome are instances of oral disorders that cause pain.

A patient experiencing disease-produced pain may be rendered variously anxious, hostile, suspicious, over-demanding, regressive and argumentative.⁵ Disease-produced pain induces emotional responses that may contravene a harmonious and productive dentist-patient relationship. The patient may manifest reluctance to accept proposed treatment. For example, a patient suffering the severe pain of an acute pulpitis may become apprehensive and contentious, and may demand that the dentist provide immediate relief through an extraction of the tooth rather than submit to the clinically preferable endodontic therapy. If he does accept prescribed treatment his negative behaviour may render even routine procedures difficult to perform efficiently.

The hostile or regressive patient presents management problems in the area of anaesthetic injection, cavity preparation, extraction, impression taking, etc. aggravating the technical difficulties.

Finally, a patient made anxious by pain is not always a reliable source of diagnostic information. Anxiety influences the intensity of the patient's pain reaction, magnify-

ing his subjective symptoms and misleading the dentist in arriving at a correct diagnosis.⁶

PERSONALITY STRUCTURE

The patient's personality structure interacting with the stresses imposed by oral disorders govern the nature and severity of his somatopsychic responses.¹ For example, a minor problem such as a rotated lateral incisor or a diastema between central incisors may produce a more profound negative body image with associated emotional difficulties in one personality type, while a gross deformity such as unsightly or missing anterior teeth may elicit superficial reactions in someone else.⁴

Denial and cancerophobia are two behavioural mechanisms used to illustrate the role of the personality structure in influencing behavioural problems with clinical significance.

Denial:

Denial is a major psychological defence mechanism which may be aroused in situations where bodily injury and consequent blows to self-esteem are involved.⁷ It is an unconscious automatic response whereby disease is treated as if it did not exist. The use of this mechanism is determined by the specific vulnerability of the patient's personality to the stress factor of disease.³

Incontrovertible clinical and radiographic evidence may reveal the presence of dental caries, a chronic alveolar abscess, a dental cyst or periodontitis. Yet the patient may reject the dentist's diagnosis and treatment recommendations in the face of no pronounced subjective symptoms. Even with definite symptoms, the patient may still use denial, thinking that if he ignores them they will disappear. This reaction presents the dentist with a difficult clinical problem of psychological origin which often may only be resolved when the patient begins to experience major symptoms such as gross swelling, intractable pain or excessive tooth mobility.

Cancerophobia:

Patients with benign growths or other innocuous oral lesions such as dry sockets, aphthous ulcers or denture irritations may interpret them as evidence or malignancy. Although unrealistic and irrational in character, patients experiencing cancerophobia suffer severe anxiety. The dentist lacking psychotherapeutic training must nevertheless deal with this condition and convince the patient that his situation is not life threatening.

From the foregoing it becomes apparent that the dentist should incorporate the concept of somatopsychic reactions into his therapeutic armamentaria. To accomplish this he must regard his patient as a psychological as well as a physiological entity. Toward this end he may employ the following measures.

Tactfully elicit relevant psycho-social information from the patient while taking his medical history without transgressing the dentist's professional prerogatives.

Observe and interpret the patient's general behaviour, relying intellectually on his psychological knowledge and training, and empirically on his intuition and experience.

Listen carefully to the patient as he ventilates his feelings concerning his dental problems.

Abstract germane data from the patient's physician, relatives and friends where available and from feedback provided by his dental auxiliaries.

Have the patient complete written psychological questionnaires such as the Cornell Medical Index, where indicated.

All this methodically accumulated information gives a fuller awareness of the patient's emotional needs relevant to his oral disorders. This enables the dentist to establish a more complete and accurate diagnosis, and to devise a more personalized, appropriate and acceptable course of treatment. It further serves to impart to the dentist objective understanding. This objectivity precludes an intolerant, antagonistic attitude toward the patient's emotional difficulties, thus promoting a relationship based on harmony and trust. This amplifies the effectiveness of supportive techniques such as explanation and reassurance.

The dentist may reassure his patient that his pain is not intractable; that he is aware of his patient's emotional discomfort and is anxious to relieve it expeditiously. He may explain carefully to his patient the exact cause and effect of his disorder, precisely what the plan of treatment is and the steps involved in its implementation. The ability to communicate supportively with his patient enhances the therapeutic efficiency of the dentist.

SUMMARY

This paper outlines the physical effects of oral disorders on the behaviour of the patient, which in turn influence oral diagnosis, treatment planning and its implementation. The dentist should develop an awareness and understanding of this somatopsychic phenomenon and evolve suitable techniques for its proper management.

Dr. Vosburg is a lecturer in behavioural science, Faculty of Dentistry, McGill University, Montreal, P.Q. Reprint requests to: Dr. F. Vosburg, 5253 Decarie Blvd., Suite 202, Montreal, Quebec.

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- 1 Arce, L. Somatopsychic disease. *Psychosomatics* 13:191, 1972.
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Données sur l'état dentaire d'un groupe d'adolescents de Charlesbourg

Diane Lachapelle-Harvey BSc, MSc

SUMMARY

In this study, the sample consisted of 159 randomly chosen adolescents from Charlesbourg, aged from 12 to 17 years old; 79 were girls and 80 were boys. One examiner, using mouth mirror, explorer, extra-oral light and four bitewing films conducted the caries examination. Dental plaque index was also calculated. The results revealed a high D.M.F. (t) and showed very poor oral hygiene habits.

Avant l'étude de Stamm et ses collaborateurs⁽¹⁾, la littérature^(2, 3, 4, 5) rapportait d'une façon générale un taux de carie très élevé pour les enfants du Québec. Citons par exemple, Perreault et ses collaborateurs⁽³⁾ qui ont trouvé chez les enfants d'âge scolaire de Montréal, un indice CAO égal à 12,33 pour les adolescentes de 13 ans. D'autres études (6, 7, 8) rapportaient que les besoins dentaires des jeunes Québécois étaient très élevés. Stamm et ses collaborateurs⁽¹⁾ ont trouvé un indice CAO moyen de 9,0 chez un échantillon de 1,093 adolescents de 13 et 14 ans. Ces derniers ont comparé leurs résultats concernant l'état dentaire à ceux obtenus par l'"International Collaborative Study of Dental Manpower" (I.C.S.D.M.)⁽⁹⁾.

Cette étude a été menée par l'Organisation Mondiale de la Santé (O.M.S.) dans cinq pays différents quant à leur mode de distribution des soins dentaires. Cette comparaison démontre que le Québec est au troisième rang de cette échelle pour son indice CAO moyen de 9,0. Il est dépassé par la Nouvelle-Zélande avec un indice de 10,7 et par la Norvège avec un indice de 12,6. Cependant, le Québec est au premier rang pour le nombre de dents absentes qui est en moyenne de 1,6⁽¹⁾. Tel que démontré par Stamm et ses collaborateurs⁽¹⁾, ce nombre de dents absentes est trois fois plus élevé que l'Australie qui occupe le deuxième rang avec un taux de 0,5 dent absente et huit fois plus élevé que le taux rapporté dans une étude faite en Ontario. Le Qué-

bec occupe également le premier rang pour son taux de dents cariées qui est en moyenne de 5,0.

Au Québec, la situation dentaire varie beaucoup selon les régions. Les trois facteurs immédiats à considérer dans le processus de la carie dentaire ont été clairement exposés par plusieurs auteurs^(10, 11, 12). Il est généralement admis que de nombreuses variables intermédiaires influencent directement ces facteurs, tels que le niveau socio-économique, l'éducation, l'accessibilité aux soins dentaires, l'influence de la culture et de l'environnement, la motivation, l'importance relative accordée à la nécessité d'acquiescer et de maintenir une bonne santé dentaire... Étant donné la diversité de la population selon les régions, la présente étude a été élaborée afin de décrire l'état dentaire d'une population d'adolescents représentatifs de la ville de Charlesbourg, en banlieue de Québec.*

MÉTHODOLOGIE

L'échantillon était composé de 159 adolescents francophones, dont 79 filles et 80 garçons âgés de 12 à 17 ans, sans handicap physique ou mental et fréquentant les écoles secondaires publiques et les polyvalentes de la Commission scolaire régionale Jean-Talon (voir tableau 1). Les sujets ont été choisis au hasard dans sept écoles des municipalités de Charlesbourg, Orsainville et Notre-Dame des Laurentides. Ces municipalités sont situées dans la banlieue nord de la ville de Québec, dans la province de Québec.

L'eau de consommation n'était pas fluorurée au moment de l'étude et les lieux de résidence antérieurs des sujets ont été obtenus par l'entremise d'un questionnaire socio-économique afin de vérifier l'effet antérieur possible

* Cette recherche comportait plusieurs autres objectifs qui seront étudiés dans des publications ultérieures.

des fluorures. L'accord des parents quant à la participation de leur enfant à cette étude a été obtenu par une lettre-réponse qui comportait également un questionnaire sur l'histoire médicale de leur enfant. La denture de chacun des sujets a été examinée par un seul dentiste avec l'aide d'un miroir buccal, d'un explorateur, en utilisant la lumière de l'unité dentaire et après avoir soigneusement

asséché les dents avec l'air comprimé. De plus, quatre radiographies interproximales ont servi à diagnostiquer les caries.

L'indice CAO de Klein et Palmer⁽¹³⁾ a été calculé pour les dents permanentes de chaque sujet. Un indice d'hygiène buccale a également été calculé. L'indice utilisé ne tient compte que de la plaque dentaire. Pour le calcul de l'indice, les surfaces buccales et linguales de toutes les dents présentes ont été examinées. Une surface buccale ou linguale était considérée comme porteuse de plaque lorsqu'elle avait de la plaque au mésial et au distal ou sur toute la région cervicale. Pour effectuer le calcul de l'indice, le total des surfaces buccales et linguales porteuses de plaque est divisé par le nombre de surfaces buccales et linguales totales:

I: indice de la plaque

$$I = \frac{\text{Nombre de surfaces porteuses de plaque}}{\text{Nombre de dents présentes} \times 2}$$

L'indice maximum est donc de 1, lorsque toutes les surfaces présentes en bouche sont porteuses de plaque dentaire.

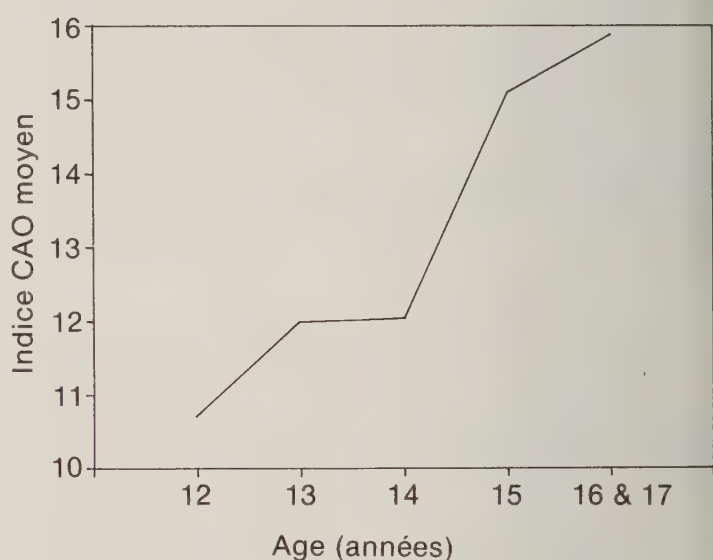


Figure 1: Moyenne des indices CAO selon l'âge de la population

Tableau I

A. Distribution de la population selon le sexe

	Nombre de sujets	%
Masculin	80	50,3
Féminin	79	49,7
Total	159	100,0

B. Distribution de la population selon leur âge*

	Nombre de sujets	%
12 ans	14	8,8
13 ans	50	31,4
14 ans	50	31,4
15 ans	35	22,0
16 ans	9	5,7
17 ans	1	0,6
Total	159	100,0

*Moyenne $\pm$ écart-type : 13.862 $\pm$ 1,076

C. Distribution de la population selon leur scolarité

	Nombre de sujets	%
Secondaire I	28	17,6
Secondaire II	82	51,6
Secondaire III	26	16,4
Secondaire IV	23	14,5
Total	159	100,0

Tableau 2: L'indice CAO moyen selon les âges

Âge des sujets	Nombre de sujets	Indice CAO		
		Moyenne	$\pm$	écart-type
12 ans	14	10,71	$\pm$	5,50
13 ans	50	12,00	$\pm$	5,10
14 ans	46	12,04	$\pm$	5,17
15 ans	35	15,11	$\pm$	5,37
16-17 ans	8	15,88	$\pm$	4,85
Ensemble des sujets	153	12,81	$\pm$	5,38

N : 153

Tableau 3 : Moyenne des composantes C, A, O selon les âges

Âges des sujets	C	n*	A	n	O	n
12 ans	6,15	13	2,17	6	5,27	11
13 ans	8,17	48	2,15	20	5,63	41
14 ans	7,63	46	3,70	23	4,94	32
15 ans	9,76	34	3,82	28	5,61	23
16 ans	9,57	7	2,20	5	8,00	7
17 ans	4,00	1	3,00	1	9,00	1
Ensemble des sujets	8,23	149	3,16	83	5,57	115

N : nombre de sujets examinés : 153

n* : nombre de sujets ayant des dents soit C, A ou O.

Toutes les analyses statistiques descriptives ont été faites à l'aide du programme S.P.S.S. (Nie et coll.⁽¹⁴⁾) au Centre de traitement de l'information de l'Université Laval.

RÉSULTATS ET DISCUSSION

INDICE DE LA CARIE DENTAIRE

Le tableau 2 donne la moyenne des indices CAO pour les sujets âgés de 12 à 17 ans. Les indices CAO sont respectivement de 10,71, 12,00, 12,04, 15,11 et 15,88; ils s'élèvent donc avec l'âge. Cependant, tel qu'illustré dans la figure 1, l'augmentation est minime entre 13 et 14 ans, indiquant que l'indice CAO diffère très peu entre ces deux groupes quant au total de ses composantes, soit le nombre de dents cariées, absentes et obturées.

Le tableau 3 et la figure 2 indiquent les moyennes générales et les moyennes selon les âges pour les composantes de l'indice CAO. La moyenne des dents cariées de 13 à 14 ans diminue de 8,17 à 7,63. De même, la moyenne des dents obturées passe de 5,63 à 4,94. Cependant, la moyenne des dents absentes augmente de 2,15 à 3,70. Donc, pour un indice CAO presque équivalent à 13 et à 14 ans, le nombre de dents extraites est plus élevé et conséquemment il y a une diminution du nombre de dents cariées et obturées. Entre 12 et 13 ans, c'est particulièrement le plus grand nombre de dents cariées qui est responsable de l'augmentation de l'indice CAO: en effet, la moyenne des dents cariées s'élève de 6,15 à 8,17 à 13 ans.

C'est entre 14 et 15 ans que s'observe la hausse la plus importante de l'indice CAO. Cette augmentation de l'indice CAO est due à un nombre plus élevé de caries et d'obturations. Étant donné le nombre très restreint de sujets d'âge de 16 et 17 ans, il n'est pas indiqué de commenter le détail des composantes de l'indice CAO dans ce groupe.

Des 153 sujets qui se sont soumis à l'examen dentaire, quatre seulement étaient sans carie, alors que les 149 autres présentaient une moyenne générale de 8,23 dents cariées qui nécessitaient d'évidence des obturations. Quatre-vingt-trois sujets avaient une moyenne générale de

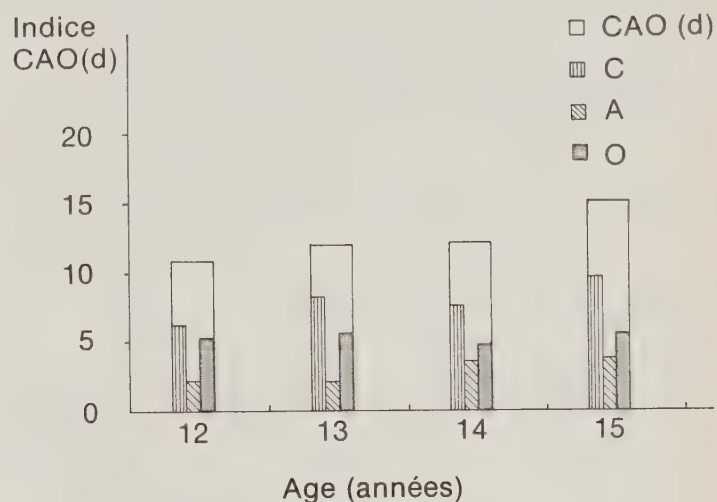


Figure 2 : Moyenne de l'indice CAO (d) et de ses composantes selon l'âge de la population.

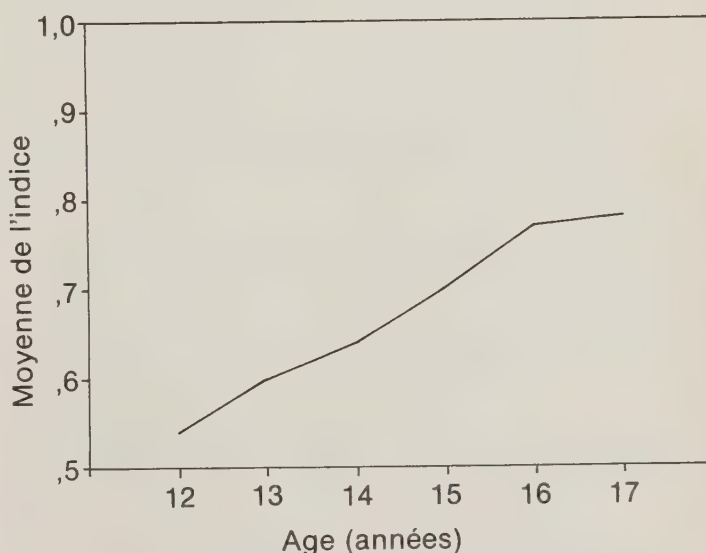


Figure 3 : Indice de la plaque dentaire moyenne des indices selon l'âge de la population

Tableau 4: Indice de la plaque dentaire* selon les âges

Âge des sujets	Nombre de sujets	Indice de la plaque dentaire		
		Moyenne	±	écart-type
12 ans	14	0,54	±	0,20
13 ans	49	0,60	±	0,24
14 ans	47	0,64	±	0,19
15 ans	35	0,70	±	0,18
16 ans	7	0,77	±	0,13
17 ans	1	0,78	±	0,0
Ensemble des sujets	153	0,64	±	0,21

*N.B.: A un indice de 1, toutes les surfaces dentaires présentent de la plaque.

3,16 dents absentes; seulement 70 sujets représentant 45,8 pour cent de la population étudiée n'avaient pas subi d'extractions dentaires. Sur un total de 153, 115 sujets avaient une moyenne de 5,57 dents obturées; des 38 sujets restants qui n'avaient aucune obturation, la plupart avaient des dents cariées puisque tel que mentionné précédemment, quatre sujets seulement étaient porteurs d'aucune carie.

INDICE DE LA PLAQUE DENTAIRE

Le tableau 4 et la figure 3 illustrent l'augmentation régulière de l'indice de la plaque dentaire selon les âges. La moyenne de l'indice se situe à 0,64. Cette moyenne nous indique que d'une façon générale chez les sujets de l'étude, plus de la moitié des surfaces dentaires buccales ou linguales, soit 64 pour cent, étaient porteuses de plaque dentaire. Les habitudes d'hygiène dentaire*, étaient caractérisées par l'usage d'une brosse à dents inadéquate, par une mauvaise méthode de brossage et par l'absence d'utilisation de la soie dentaire. Seulement 15,1 pour cent des sujets de l'étude ont un indice de plaque inférieur à 0,40, ce qui caractérise une hygiène dentaire jugée acceptable; 42,8 pour cent des sujets se retrouvent avec un indice de 0,7 à 1,0 indiquant une hygiène dentaire très négligée.

L'état dentaire est alarmant chez les adolescents de Charlesbourg. Pour un âge moyen de 13,9 ans, l'indice CAO s'élève à 12,81. Le nombre de dents absentes ou cariées est élevé et il y a peu de dents obturées. Comparativement à l'indice CAO le plus élevé de l'échelle internationale de Toth⁽¹⁵⁾ qui se situe à 11,70 pour les enfants de 7 à 14 ans, Perreault et ses collaborateurs⁽³⁾ avaient trouvé chez les adolescents de 13 ans, d'origine canadienne française un indice moyen égal à 11,36. Dans la présente étude, le CAO moyen des adolescents de 13 ans se situe à 12,00.

D'autre part, Stamm et ses collaborateurs⁽¹⁾ ont trouvé chez un groupe d'adolescents francophones de 13 et 14 ans un indice CAO moyen de 9,4. Ces enfants provenaient

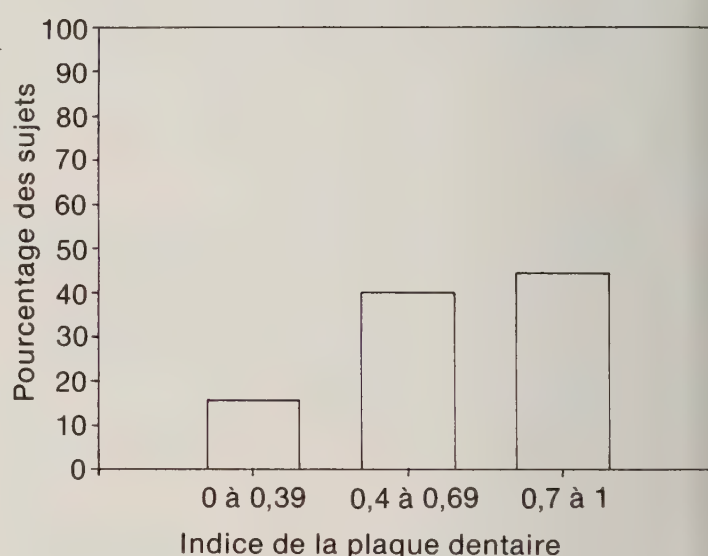


Figure 4: Répartition de la population selon l'indice de la plaque dentaire

de toutes les régions de la province de Québec. Après avoir comparé leurs résultats à l'enquête internationale I.C.S.D.M.⁽⁹⁾, Stamm et ses collaborateurs situent le Québec au troisième rang. D'après les résultats de la présente étude, les adolescents de 13-14 ans de Charlesbourg se situeraient au 2^{ème} rang de cette échelle avec un CAO moyen de 12,02, le premier rang revenant aux adolescents de la ville de Trondelag en Norvège, avec un CAO de 12,06. La plaque dentaire est très abondante chez les sujets de l'étude, ce qui laisse supposer un manque évident d'hygiène dentaire. D'autres auteurs^(1, 2) arrivent aux mêmes conclusions.

L'état dentaire des jeunes Québécois francophones de notre étude est caractérisé par un nombre élevé de dents absentes et par un manque d'hygiène dentaire. Les adolescents de l'étude provenaient tous de la même régionale qui inclut trois municipalités tel que mentionné au début du texte. Les milieux socio-économiques des familles des sujets ne sont certes pas défavorisés. Le problème d'accès-

* La description et l'analyse des habitudes d'hygiène dentaire des adolescents de l'étude feront l'objet d'une publication ultérieure.

ibilité aux soins dentaires dans cette région semblent être résolu depuis quelques années, étant donné que de plus en plus de dentistes s'installent dans ces municipalités afin d'en desservir la population.

D'une part, il existe sûrement un manque d'intérêt et de motivation de la population quant aux bienfaits d'une santé dentaire acquise et maintenue. Mais d'autre part, on peut s'interroger sur les actions portées pour favoriser cette motivation. À en juger par le nombre de dents absentes chez les sujets de l'étude, on peut conclure à un manque d'intérêt des professionnels dentaires quant à l'établissement d'une pratique orientée vers la prévention; tous les motifs évoqués remettant en question l'efficacité de la prévention dentaire sont maintenant passés à l'histoire.

Depuis l'avènement au Québec du phénomène "hygiène dentaire" datant du début de la dernière décennie, il y a eu une prise de conscience remarquable des bienfaits de la prévention, mais il faut en conclure que ce n'est pas suffisant pour abaisser le taux de carie!

RÉSUMÉ

La présente étude a été élaborée afin de décrire l'état dentaire d'une population d'adolescents de Charlesbourg. L'échantillon était composé de 159 adolescents âgés de 12 à 17 ans, choisis au hasard dans sept écoles secondaires de la régionale Jean-Talon à Charlesbourg. La dentition de chacun des sujets a été examinée par un seul dentiste, avec l'aide d'un miroir buccal, d'un explorateur, en utilisant la lumière de l'unité dentaire et avec quatre radiographies interproximales. L'indice CAO a démontré un taux de caries et de dents absentes très élevé et l'indice de la plaque dentaire révéla que l'hygiène buccale était très négligée dans l'ensemble et presque inexistante chez certains sujets.

L'auteur est membre du Centre de Recherches en nutrition de l'Université Laval.

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- madame Jeannine Sévigny, Ph.D., directrice de thèse*;
- les professionnels et tout particulièrement le docteur Michel Guérin, dentiste, et le personnel de la clinique dentaire du Centre Hospitalier de l'Université Laval, qui par leur collaboration ont rendu possible l'examen dentaire;
- la direction de l'École de médecine dentaire qui a octroyé les fonds nécessaires.

* Cette recherche a été élaborée dans le cadre d'une thèse de maîtrise intitulée: "Influence de l'alimentation et des pratiques d'hygiène dentaire sur la santé dentaire chez un groupe d'adolescents fréquentant la régionale Jean-Talon à Charlesbourg."

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The DAT as a predictor of Preclinical Technique Performance

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ABSTRACT

This study compared the predictability of subtests and averages of the Dental Admissions tests on the preclinical dentoform performance of second year dental students in operative and fixed prosthodontics technique performance. The results indicated that the Chalk Carving test is the most valuable test for predicting preclinical technique performance.

INTRODUCTION

The prediction of dental student success in psychomotor skills has been attempted over the years by 2D and 3D Perceptual Motor Ability Tests (PMAT) and Chalk Carving tests as part of the Dental Admission Test (DAT) battery. Currently in the USA the PMAT comprises the manual component of the DAT while in Canada both the PMAT and Chalk Carving tests are used. Although Zullo¹ suggests they may measure different constructs, Graham² showed that the two tests performed equally well in predicting technical performance in a sample of USA dental schools. DeRevere³ found correlations of .37 and .39 between freshman operative technique grades and the Chalk

Carving and Spatial Relations (an early form of PMAT test) respectively. Chebib⁴ found Chalk Carving correlated .36 to .45 with laboratory and clinical performance throughout the four years of dental education, while Bellanti⁵ found a correlation of .37 between Chalk Carving and fixed prosthodontic technique grades.

These correlations for Chalk Carving, although not high, are better than for other subtests of the DAT for predicting laboratory and clinical performance.

These correlations are limited by:

1. range restriction of the group
2. contamination of the criterion variable by didactic grades
3. questionable reliability of course grades

The aim of this paper is to investigate the ability of the PMAT and Chalk Carving tests to predict success in second year preclinical operative and fixed prosthodontics dentoform technique courses for dental students at The University of British Columbia.

Method

The operative technique work performed by a total of 114 second year students was evaluated by the four teachers of the course using the same method for the years 1976,

1977 and 1978. The technique work for fixed prosthodontics was evaluated for the same groups of students in the same way. These grades were standardized and grouped into fixed prosthodontics, operative, and combined operative and fixed prosthodontics. These data represented the dependent variables.

The independent variables consisted of the psychomotor components of the DAT battery. They were:

- | | |
|-------------------|---------|
| 1. Manual Average | n = 30 |
| 2. PMAT Average | n = 114 |
| 3. 2D | n = 114 |
| 4. 3D | n = 114 |
| 5. Chalk Carving | n = 64 |

Two separate multiple regression analyses were done, one using the average scores of the DAT, the other subtests as the independent variables.

Results and Discussion

The multiple regression correlation between fixed prosthodontics and the two DAT Averages yielded zero order correlations of .38 with Manual Average and with the subtests yielded .31 with Chalk Carving (significant at .05 level). The correlations between fixed prosthodontics and 2D, 3D and PMAT Average were .06, .15, and .09 respectively. Similarly for operative dentistry, the zero order correlations were .32 with Manual Average and .33 with Chalk Carving (significant at .05 level). The correlations between operative and 2D, 3D and PMAT Average were .11, .18, and .14 respectively. Finally, for the combination of operative and fixed prosthodontics, the zero order correlations were .39 with Manual Average and .35 with Chalk Carving (significant at .05 level). The correlations between the combination of operative and fixed prosthodontics and 2D, 3D and PMAT Average were .09, .18, and .13 respectively. These data indicate that Chalk Carving accounted for most of the variance attributed to the DAT of operative, fixed prosthodontics, and combined grades.

It is important to stress that these data apply to students entering the Faculty of Dentistry at the University of British Columbia and it may not be possible to extrapolate to other universities. Certainly, in Ontario, where it is possible to undergo training courses in chalk carving, the results may not be as predictive as in other parts of Canada.

It is also important to note, that during the years that this study was undertaken, the Admissions Committee of the University of British Columbia did not preclude entrance into the Faculty of Dentistry on the basis of low manual scores on the DAT, a policy which has now changed. This, of course, leads to higher correlations, with the limitation of range restriction.

CONCLUSION

Although correlations are low, they do indicate that Chalk Carving alone is a more valuable test for pre-

dicting preclinical technique grades than are the other manual components of the DAT.

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Announcements

CANADA

September/septembre

The Canadian Symposium on Drug Diversion, sponsored by the Canadian Pharmaceutical Association, Solicitor General of Canada, Department of Justice Canada, and Health & Welfare Canada, Canadian Government Conference Centre, Rideau Street, Ottawa, Ontario, September 15-16, 1982. Contact: Canadian Pharmaceutical Association, 1815 Alta Vista Drive, Ottawa, Ontario K1G 3Y6. Phone: (613) 523-7877.

The 42nd Annual Northern Ontario Dental Association Convention, Senator Hotel, Timmins, Ontario, September 17-19, 1982. Contact: Dr. Ray Kurys, 137 Pine South, Timmins, Ontario P4N 2K3. Phone: (705) 267-3900.

October/octobre

Western Society of Teachers of Oral Pathology Annual Meeting, Faculty of Dentistry, University of British Columbia, Vancouver, B.C., October 13-15, 1982. Contact: Dr. R.W. Priddy, Department of Oral Medicine, Faculty of Dentistry, University of British Columbia, 2199 Wesbrook Mall, Vancouver, B.C. V6T 1Z7.

Annual Convention of the Newfoundland Dental Association, Gander Hotel, Gander, Newfoundland, October 14-16, 1982.

Alberta Academy of Periodontics Continuing Education presents "Periodontal Considerations in a Dental Practice" by Professor S. Ramfjord, University of Michigan, Calgary, Alberta, October 15-16, 1982. Contact: Dr. Malcolm P. Miller, Suite 302, 2303 4th Street S.W., Calgary, Alberta T2S 2S7. Phone: (403) 265-5033.

The Canadian Myo-Tronics Research Society presents the **Neuromuscular Occlusion Seminar, Stage I**, Holiday Inn, Winnipeg, Manitoba, October 15-16, 1982 with Dr. Dayton D. Krajicek, Director of Education for Myo-Tronics Research, Seattle, Washington. Contact: Myo-Tronics Research Inc., P.O. Box 2352, Drayton Valley, Alberta T0E 0M0.

Canadian Association of Oral and Maxillofacial Surgeons 1982 Scientific Session: Pre-Intra and Post-Operative Manage-

ment of the Major and Maxillofacial Surgery Patient, Four Seasons Hotel, Toronto, Ontario, October 15-17, 1982. Contact: Dr. David M. Slavkin, Co-chairman, 1920 Weston Rd., Suite 209, Weston, Ont. M9N 1W4.

The Fourth Biennial Symposium on Occlusal Studies, Hyatt Regency Hotel, Vancouver, British Columbia, October 17-20, 1982. Contact: The Society for Occlusal Studies, 1729 South Douglass Road, Anaheim, California 92806, U.S.A. or The Director, Division of Continuing Dental Education, 2199 Wesbrook Mall, U.B.C., Vancouver, B.C. V6T 1Z7.

The Annual Meeting of the Canadian Academy of Endodontics, Four Seasons Hotel, Montreal, Quebec, October 22-24, 1982. Contact: Dr. Herb Borsuk, 4141 Sherbrooke St. W., Suite 515 Westmount, Que. H3Z 1B8. Phone: (514) 933-8424.

December/Décembre

The Canadian Myo-Tronics Research Society presents the **Neuromuscular Occlusion Seminar, Stage I**, Airport Inn, Vancouver, B.C., December 3-4, 1982 with Dr. Dayton D. Krajicek, Director of Education, Myo-Tronics Research, Seattle, Washington. Contact: Myo-Tronics Research Inc., P.O. Box 2352, Drayton Valley, Alberta T0E 0M0.

The Toronto Academy of Dentistry Annual Winter Clinic, Royal York Hotel, Toronto, Ontario, December 6, 1982. Contact: Academy of Dentistry, 234 St. George St., Toronto, Ont. M5R 2P2. Phone: (416) 967-5649. **Please note change of day and date from previous years.**

Conference on Medical Device Technology in the 80's, Harbour Castle Hotel, Toronto, Ontario, December 6-8, 1982. Contact: Canadian Association of Manufacturers of Medical Devices, 480 Garyray Drive, Weston, Ont. M9L 1P8. Phone: (416) 745-9210.

International

September/septembre

The 13th International Cancer Congress, Seattle, Washington, September 8-15, 1982. Contact: Congress Office, Suite 1800, Fourth and Blanchard Building, Seattle, WA 98121, U.S.A. Phone: (206) 621-9440.

The seminar "Tomorrow's Dentistry Today", sponsored by the Alpha Omega Foundation and the Friends of the Hebrew University, Grand Hyatt Hotel, New York City, U.S.A., September 11-12, 1982. Contact: Dr. Seymour Evans, Chairman, Alpha Omega Conference, 225 Westchester Ave., Port Chester, N.Y. 10573, or call Tricia Collins (212) 840-5840.

Asociacion Argentina de Ortopedia Funcional de Los Maxilares, 25th Anniversary, Buenos Aires, Argentina, September 19-23, 1982. Contact: Dr. S.A. Gandolfo, Secretario, Asociacion Argentina de Ortopedia Funcional de Los Maxilares, Buenos Aires, Argentina.

The 5th Annual Greater Niagara Frontier Dental Meeting, presented by the Dental Alumni Association of the State University of New York at Buffalo, Buffalo Convention Center, Buffalo, New York, September 23-25, 1982. Contact: Dental Alumni Association, State University of New York at Buffalo, 194 Farber Hall, Buffalo, New York 14214. Phone: (716) 831-2836.

"Orthodontics for the General Practitioner", a dental seminar sponsored by UBC's Faculty of Dentistry and the School of Dentistry, Oregon Health Sciences University, London, England, September 23-25, 1982. Contact: Continuing Ed. in the Health Sciences, #105-2194 Health Sciences Mall, UBC, Vancouver, B.C. V6T 1W5.

October/octobre

Third International Dental Congress on Modern Pain Control, Tokyo, Japan, October 3-6, 1982. Contact: Third International Dental Congress on Modern Pain Control, c/o Japan Convention Services Inc., Nippon Press Center Building, 2-1, Uchisaiwai-cho 2-chome, Chiyoda-ku, Tokyo 100, Japan.

The 68th Annual Meeting of the American Academy of Periodontology, Disneyland Hotel, Anaheim, California, October 6-9, 1982. Contact: American Academy of Periodontology, 211 East Chicago Avenue, Room 924, Chicago, Illinois 60611.

The First International Seminar on Implantology, Lariboisière Hospital, Paris, France, October 7-9, 1982, just prior to the FDI Congress in Vienna. Contact: Mrs. Noelle Jouhaud, 5 avenue de l'Opéra, 75001 Paris, France; or Dr. G. Bastien, 2472 Bayview Avenue, Willowdale, Ontario M2L 1A7, (416) 444-7744.

Le premier séminaire international d'implantologie aura lieu à l'hôpital Lariboisière (Paris, France) du 7 au 9 octobre 1982, juste avant le Congrès de la FDI à

Vienne. Agent: Mme Noëlle Jouhaud, 5, avenue de l'Opéra, 75001 Paris, France, ou le Dr G. Bastien, 2472 Bayview Avenue, Willowdale, Ontario M2L 1A7 (tél.: 16 444 7744).

The American Dental Association's President's Conference on Dentist/Patient Relations and Managing Patients' Fears, Anxieties and Pain, ADA Headquarters, October 8-9, 1982. Contact: Dr. William Ayer, Bureau of Economic and Behavioral Research, ADA, 211 East Chicago Avenue, Chicago, Illinois.

Fédération Dentaire Internationale, 70th Annual World Dental Congress, Vienna, Austria, October 11-16, 1982.

Second International Symposium on Overdentures, San Antonio, Texas, October 15-17, 1982. Contact: Dr. K.D. Rudd, Associate Dean for Continuing Dental Education, University of Texas Health Science Center at San Antonio School, 7703 Floyd Curl Dr., San Antonio, Texas 78284. Phone (512) 691-7451.

The 39th Annual Meeting of The American Institute of Oral Biology, Palm Springs, California, October 29 to November 2, 1982. Contact: Executive Secretary, P.O. Box 481, South Laguna, California 92677.

November/novembre

Consensus Development Conference on Clinical Applications of Biomaterials, National Institutes of Health, Bethesda, Maryland, November 1-3, 1982. Contact: John W. Boretos, Building 13, Room 3W13, National Institutes of Health, Bethesda, Maryland 20205.

The American Academy of Implant Dentistry's 31st Annual Educational program IMPLANT UPDATE, Las Vegas, Nevada, November 1-6, 1982. Contact: AAID Central Office, 515 Washington Street, P.O. Box 2, Abington, Massachusetts 02351. Phone: (617) 878-7990.

"A Colloquium on Dental History, Writing for the Scientific Literature, and Bioethics" is the subject at the Annual Meeting of the American Academy of the History of Dentistry, Las Vegas Hilton International Hotel, Las Vegas, Nevada, November 5, 1982. Contact: University of Southern California School of Dentistry, P.O. Box 77951, 925 West 34th Street, Los Angeles, California 90007.

The 123rd Annual Session of the American Dental Association, Las Vegas, Nevada, November 6-9, 1982. Contact: ADA Council on International Relations, 211 East Chicago Avenue, Chicago, Illinois 60611. Phone: (312) 440-2726.

The 1982 Formal Continuing Education Clinic Program will be held at the 36th International Education Congress of Dental Technology, Sheraton Centre, New York City, N.Y., November 18-20, 1982. For further information, contact: IECDT, Suite 507, 1500 Broadway, New York, N.Y. 10036, or call Arthur D. Wilde, Executive Director, at (212) 730-0580.

International Congress of the Association Dentaire Francaise, Palais des Congres, Paris, France, November 23-27, 1982. Examining the two main aspects of professional activity — Preventive Dentistry & Therapeutic Care. Simultaneous interpretation in English, French and German will be available during the main scheduled events. Contact: Dr. Guy Roberts, Secretary-General, 92 avenue de Wagram, 75017 Paris, France.

British Dental Association — Metropolitan Branch, First International Prosthodontic Symposium, Royal Lancaster Hotel, London, England, November 25-27, 1982. Contact: Dr. M. Seymour, Programme Co-ordinator, 22 Devonshire Place, London WIN 1PD, England.

December/Décembre

The Sri Lanka Dental Association's 50th Anniversary, Colombo, December 4-6, 1982. Contact: Dr. L.S.W. Dassanayake, Chairman, Organising Committee, Sri Lanka Dental Association, Professional Centre, 275/5, Baudhaloka Mawartha, Colombo 7, Sri Lanka.

The Barbados Dental Association's 2nd Convention for The Caribbean Atlantic Regional Dental Association in conjunction with the Institute for Further Education, Barbados, W.I., December 5-8, 1982. Contact: Dr. Bernard Tuckman, 720 North Park Ave., Easton, Connecticut 06612, U.S.A.

The 37th Indian Dental Conference, Bangalore, India, December 26-29, 1982. Contact: Dr. Pradip Jayna, Hon. General Secretary, M-75, Connaught Circus, New Delhi-110001, India.

1983 +

The 13th Annual Miami Winter Meeting, sponsored by the East Coast District Dental Society (FL), Fontainebleau Hilton, Miami Beach, Florida, January 20-22, 1983. Contact: East Coast District Dental Society, 420 South Dixie Highway, 2-E, Coral Gables, Florida 33146. Phone: (305) 667-3647.

The "Kieferorthopadische Fortbildungstagung in Kitzbuhel" meeting, Kitzbuhel/Tyrol, Austria, January 30- February 5, 1983. Contact: Medizinische Ausstellungs- und Werbegesellschaft, Maria Rodler & Co., A-1014 Wien I, Freyung 6, Postfach 155.

9th Congress of Dentistry for Children, Wenworth Melbourne Hotel, Australia, February 21-24, 1983. Contact: Dr. Roger K. Hall, Royal Children's Hospital, Parkville, 3052, Victoria, Australia.

Virgin Islands Dental Association Convention, February 27 to March 5, 1983. This year's theme is "Nutrition, Awareness, and Future Focus", and speakers include Drs. Cheraskin, Ken Olsen, Robert Goepp and Harold Slavkin. Limited to 300 registrants. For information contact: Dr. R. Brandon, 85 Lonsdale Drive, London, Ontario N6G 1T4.

The International Congress of Oral Implantologists Annual Meeting and Scientific Sessions, Beverly Hilton Hotel, Beverly Hills, CA, March 11-13, 1983. Contact: Mr. Clifford J. Kirschner, Executive Director, The International Congress of Oral Implantologists, P.O. Box 2277, Grand Central Station, New York, N.Y. 10163, (201) 783-6300.

International Conference of Dental Surgeons, Rawalpindi/Islamabad, Pakistan, March 22-26, 1983. Contact: Chairman, Organizing Committee, Armed Forces Institute of Dentistry, Rawalpindi, Pakistan.

First International Symposium on Periodontics and Restorative Dentistry, Sheraton-Boston Hotel, Boston, Massachusetts, April 28-30, 1983. Contact: Kim Vander Steen, Quintessence Publishing Co., Inc., 8 S. Michigan Avenue, Suite 2301, Chicago, Illinois 60603. Phone: (312) 782-3221.

The North Central region, in conjunction with the Northeastern region of the American Academy of Dental Group Practice, will hold its 1983 annual meeting in Canada, Westin Hotel, Toronto, Ont., May 13-15, 1983. Contact: American Academy of Dental Group Practice, Ms. Joann Junkins, Executive Secretary, 1709 Elka Lane, Madison, Wisconsin 53704, Phone: (608) 241-2609.

The 1983 Annual Convention of Les Journées Dentaires du Québec, Montréal, Québec, May 28-June 1, 1983. Contact: Dr. Morton Lang, Executive Director, Les Journées Dentaires du Québec, 3565 rue Berri, Suite 200, Montréal, Québec H2L 4G3. Phone: (514) 842-9112.

The Canadian Association of Oral and Maxillofacial Surgeons Meeting, Vancouver, British Columbia, June 3-6, 1983. Contact: Dr. Brian M. Abrams, Secretary, Canadian Association of Oral & Maxillo-

Announcements

facial Surgeons, 410 - 11012 MacLeod St.S., Calgary, Alta. T2J 6A5.

The next meeting of the American Dental Society of Europe will be held at the St. Pierre Park Hotel, Guernsey from June 28 to July 1, 1983. All enquiries should be made to: Brian J. Parkins, Hon. Secretary, 57 Portland Place, London W1N 3AH England.

The 5th Canadian Congress of Dentistry for Children, Westin Hotel, Calgary, Alberta, July 1-3, 1983. Contact: Dr. Jack A. Derbyshire, 496-115-9th Avenue S.E., Calgary, Alberta T2G 0P5. Phone: (403) 262-7000.

Meeting of the Canadian Academy of Prosthodontics, Vancouver, B.C., September 20-22, 1983. Contact: Dr. B.M.

Jackson, 22 Water Street S., Kitchener, Ontario N2G 4K4.

Canadian Dental Association, 1983 National Convention, Vancouver, British Columbia, September 25-28, 1983.

Fédération Dentaire Internationale, 71st Annual World Dental Congress, Tokyo, Japan, November 14-20, 1983. Contact: Japan Dental Association, 1-20, Kudan-Kita 4-chome, Chiyoda-ku, Tokyo 102, Japan.

Canadian Dental Association, 1984 National Convention, Montreal, Quebec, April 8-12, 1984. Contact: Dr. Morton Lang, O.D.Q., 3565 Berri St., Suite 200, Montreal, Que. H2L 4G3. Phone: (514) 842-9112.

The 1984 Annual Convention of Les Journées Dentaires du Québec, Montréal, Québec, April 8-12, 1984. The convention will be held jointly with the Canadian Dental Association convention.

Canadian Dental Association, 1985 National Convention, Ottawa, Ontario, September 29-October 2, 1985.

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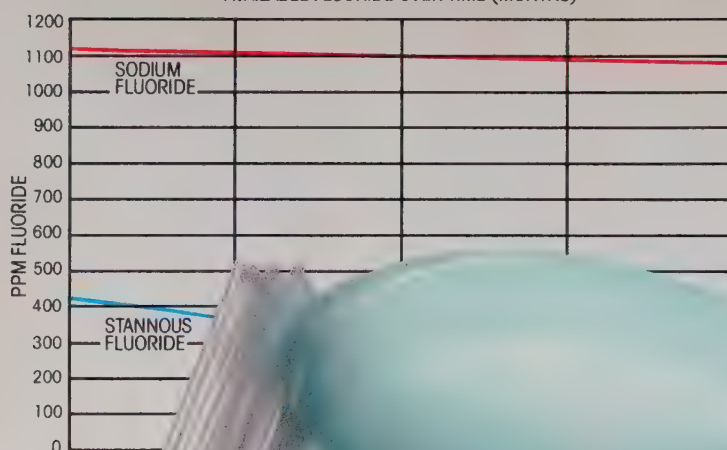
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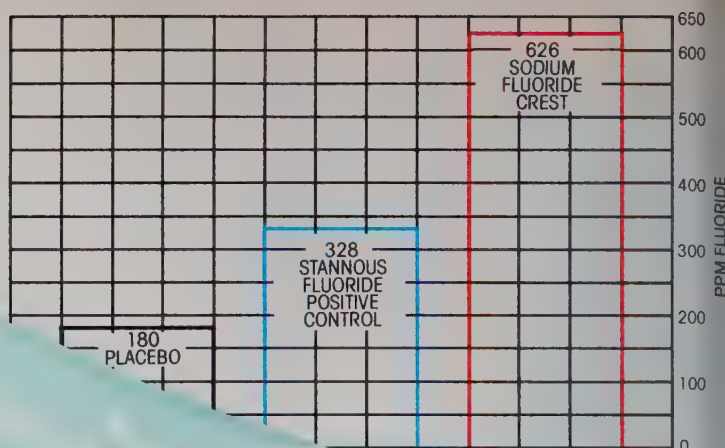
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1. Zacherl, W.A.: Pharm Therap Dent, 6:1-7, 1981.
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7. Ostrom, C.A., et al: J Dent Res, 56(3):212-221, 1977.
8. Zahradnik, R.T.: J Dent Res, 59(6):1065-1066, 1980.



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Dr. John Christie

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Dr. Robert Sexton

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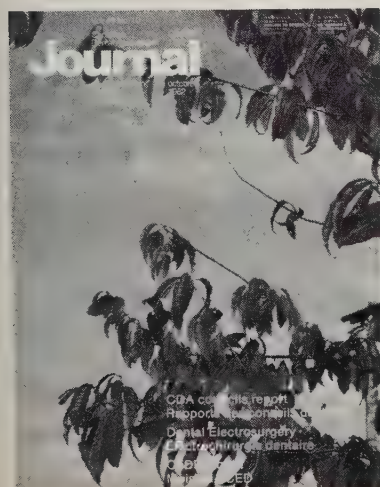
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612 Le Dr G.W. Myers félicite le Dr Erwin Lightman pour son éditorial du mois de juin sur les soins accordés aux personnes âgées. Cependant, il est d'avis que de plus grands efforts doivent être fournis pour répondre aux pressants besoins dans ce domaine.

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1982

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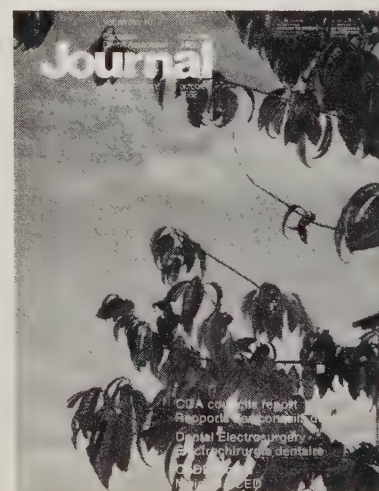
Mois du FCED

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Tout abonnement est payable à l'avance en dollars canadiens. Au Canada — \$35, au États-Unis — \$35, partout ailleurs — \$38.

La direction du Journal ne partage pas nécessairement les opinions qu'expriment ses collaborateurs à moins que l'Association Dentaire Canadienne ne les ait adoptées officiellement.



TREATMENT OF THE ELDERLY — IS HELP AHEAD?

Dr. Erwin Lightman is to be congratulated for his editorial which appeared in the June issue of this Journal. The article was entitled "Geriatric Treatment — A Crying Need."

His obvious concern for the general and dental well-being of elderly persons is commendable and his equally obvious frustration about the poverty of continuing practice and humanitarian delivery of treatment to them is understandable.

I think Dr. Lightman has pinpointed and enunciated for us — the dental profession, the educators, the researchers and dental students — a problem in our society that has not been addressed effectively on a global basis. Certainly, some individual practitioners and local personnel have rendered selfless and even heroic dental service to aged persons. Most, if not all, dental schools have in place a component of geriatric dentistry. But there has not been a unified or general approach to this situation of desperate need in our country.

However, maybe, just maybe, there might be hope at last. Dr. Lightman's indictment is timely. The Association of Canadian Faculties of Dentistry/L'Association des facultés dentaires du Canada is sponsoring a "Conference on Geriatric Dentistry" under the chairmanship of Dr. D.W. Banting, Department of Paediatric & Community Dentistry, Faculty of Dentistry, the University of Western Ontario. This Conference will be held in London, Ontario, in late February, 1983. Lest we be accused of perpetuating the "Study and Survey Syndrome," let me hasten to say that this is not a study — not a survey. Emphasis is on the teaching of Geriatric Dentistry, especially to undergraduate dental and dental auxiliary students. Participating in the Conference will be at least one chosen representative from each of the ten dental schools, with several speakers, of international renown in the field of geriatric medicine and dentistry featured. Every effort, within financial constraints, will be made to include additional delegates from the dental schools. The Canadian Dental Association, Health and Welfare Canada and the Registrars of the provincial licensing bodies will be invited to attend.

A tentative format for the Conference has been established. Briefly, it is this:

The state of the art will be examined in the first phase of the discussions to give participants a common denominator on which to build. Delegates will be requested to report on the availability and quality of hospital and other dental facilities in prescribed locations. Estimates of the numbers and types of dental personnel required to provide the needed dental service will be made. Ways and means of achieving these types and numbers will be examined. Finally, a plan will be developed for putting into motion the actions which will need to be taken by the profession and the dental schools, if dentistry for the elderly is going to be delivered in a responsible and positive fashion.

These goals are ambitious for a two-day conference. They may not be achievable in that time frame. However, they will develop a base from which to work and on-going planning can continue if an effective organization is established.

The matter of making dentistry for the aged attractive to a reasonable segment of the profession is beyond the scope of this Conference. But it is a first step. A future treatment-oriented meeting will likely have to be held, to plan the organization of delivery services. Whatever guidelines and recommendations may come forth to the dental schools will be positive and clear. The schools will be urged to consider favorably the recommendations as they apply locally.

It is entirely probable that some type of extern or outreach program may be recommended for the undergraduate curriculum. We must concede, however, that each dental faculty has the final choice of whether or not to adopt the guidelines or any part of them.

Perhaps this Conference may provide the springboard for a much greater awareness and involvement in the dental care for the elderly.

We hope so!

*G.W. Myers, DDS
Executive Director
The Association of Canadian Faculties of Dentistry
University of Alberta*

LES SOINS POUR LES GENS ÂGÉS: UN ESPOIR LUIT-IL?

Le Dr Erwin Lightman mérite des félicitations pour l'éditorial qu'il a signé dans le numéro de juin de ce journal et intitulé: "Dentisterie pour les gens âgés: un pressant besoin." Il faut certes louer l'intérêt évident qu'il porte au bien-être général et dentaire des gens âgés, et on comprend très bien pourquoi, de façon tout aussi évidente, il paraît frustré par la pauvreté des soins et des traitements humanitaires qu'on leur accorde ordinairement.

Je crois que le Dr Lightman a indiqué et défini pour nous, — les membres de la profession dentaire, les éducateurs, les chercheurs et les étudiants en dentisterie, — un problème auquel, dans notre société, nous ne nous sommes pas attaqués efficacement de façon général. Bien entendu, il y a des médecins et des groupes locaux qui ont rendu aux vieillards des services dentaires, faisant ainsi preuve d'abnégation et même d'héroïsme. Et la plupart, sinon toutes les écoles dentaires disposent d'installations dentaires pour les traiter. Cependant, il n'y a pas eu d'efforts concertés ou une approche générale pour améliorer cette situation désespérante au Canada.

Toutefois, il se pourrait — c'est une possibilité seulement — qu'il y ait enfin quelque espoir. Le Dr Lightman a lancé ses accusations à propos. L'Association des Facultés dentaires du Canada parrainera une Conférence sur la dentisterie gériatrique qui sera présidée par le Dr D.W. Banting (Département de dentisterie pédiatrique et sociale, Faculté de dentisterie, Université de Western Ontario) et qui aura lieu à London (Ontario) à la fin de février 1983. Afin qu'on ne nous accuse pas de perpétuer le "syndrome des études et des enquêtes," je m'empresse de dire que ce ne sera ni l'une ni l'autre. Le point important de la conférence sera l'enseignement de la dentisterie gériatrique, surtout aux non diplômés dentaires et aux étudiantes auxiliaires. Y participeront au moins un représentant de chacune des dix écoles dentaires ainsi que plusieurs conférenciers qui possèdent une réputation internationale en médecine gériatrique et en dentisterie. Si les budgets le permettent, d'autres représentants des écoles seront invités. Enfin, on invitera aussi l'Association dentaire canadienne, Santé et Bien-être social Canada et les secrétaires généraux des ordres professionnels provinciaux.

On a déjà établi un programme provisoire pour la conférence. Le voici en bref:

Au cours de la première partie, on étudiera la situation de la discipline en question afin de donner aux participants une base commune de discussion. On demandera aux représentants de présenter des rapports sur les installations hospitalières et dentaires dont on dispose dans certains endroits et sur leur qualité. On essaiera de déterminer le genre de personnel dentaire requis pour rendre les services exigés ainsi que le nombre de ses membres. On examinera divers moyens de déterminer ce genre et ce nombre. Finalement, on établira un plan afin de donner suite aux décisions que devront prendre la profession et les écoles dentaires, si on veut que les soins dentaires pour les gens âgés soient administrés d'une manière qui leur inspire confiance et leur soit utile.

Pour une conférence de deux jours, ces objectifs paraissent ambitieux et il se peut qu'on ne les atteigne pas. Cependant, des fondements seront jetés qui, grâce à un travail et à une planification bien menés, mèneront à la création d'une organisation efficace.

Certes, la conférence ne réussira pas à intéresser une grande partie de la profession à la dentisterie gériatrique. Toutefois, ce sera un premier pas dans cette direction. Il faudra vraisemblablement tenir une autre rencontre portant sur les traitements afin de planifier l'administration des soins. Quelles que soient les directives et les recommandations données aux écoles dentaires, elles seront claires et pratiques, et on exhortera celles-ci à les examiner d'un oeil favorable pour voir si elles s'appliquent dans leur région. Il est tout à fait probable qu'on recommandera, à l'intention des étudiants non diplômés, un programme externe et tourné vers l'extérieur. Cependant, nous admettons qu'il appartiendra à chaque école dentaire de décider si elle adoptera ou rejettera, en tout ou en partie, les directives proposées.

Grâce à la conférence, peut-être la profession dentaire sera-t-elle plus consciente des soins dont ont besoin les gens âgés et participera-t-elle davantage à leur administration.

En tout cas, nous l'espérons.

*Le directeur administratif de
l'Association des Facultés dentaires du Canada,
Université de l'Alberta,
le Dr G. W. Myers*

Ten questions your patients may ask about the new low-calorie sweetener, NutraSweet™

Recently, foods and beverages made with a completely new kind of food sweetener, NutraSweet* aspartame sweetener, were introduced in the marketplace. Here are the answers to some of the most frequently asked questions about this revolutionary new product.

1. Exactly what is NutraSweet?

NutraSweet is not a sugar. NutraSweet is a sweet, nutritive substance made of protein components like those found naturally in most foods. It is a sweet compound of two amino acids, aspartate and phenylalanine.

2. What foods are made with NutraSweet?

A variety of foods are made with NutraSweet: carbonated soft drinks, pre-sweetened cereals, instant puddings and dessert toppings, flavored crystal beverages and chewing gum.

Equal® (Égal® in French), the new low-calorie tabletop sweetener in packets and tablets, is also made with NutraSweet.

3. Can NutraSweet reduce calories in foods? NutraSweet sweetens with far fewer calories than sugar. For example, a teaspoon of sugar contains 16 calories. NutraSweet delivers equivalent sweetness with only 1/10 of one calorie. That means, in some foods made with NutraSweet, calories may be reduced as much as 95 percent (see chart below).

4. Can children have foods made with NutraSweet? Unlike many non-nutritive sweeteners, NutraSweet has been clinically tested with people of all ages.** If a person consumes an amount of NutraSweet equivalent in sweetness to one teaspoon of sugar, he takes in 8.5 mg. of aspartate and 10.6 mg. of phenylalanine. By way of comparison, he takes in 50 times

these amounts when he drinks an 8 oz. glass of milk.

5. Are foods made with NutraSweet more nutritious? Sometimes. For example, a pre-sweetened cereal made with NutraSweet can offer more protein,



fiber, vitamins and minerals per serving than the same size serving made with sugar. That's because sugar's bulk and calories can be replaced with more cereal grain.

6. Can NutraSweet help reduce tooth decay? Too many sweets in the diet, combined with poor dental habits, contribute to tooth decay. While diet is only one factor, substituting foods made with NutraSweet for sugar-sweetened foods may help to reduce cavities.

Supporting this theory are studies conducted by the U.S. National Institute of Dental Research that showed use of NutraSweet was not associated with the formation of cavities in animals***

7. Can persons with diabetes eat the foods made with NutraSweet? NutraSweet is wel-

come news for persons with diabetes because it is digested and utilized by the body as protein. That means some foods and beverages formerly high in sugar may soon be enjoyed because with NutraSweet most beverages will be totally sugar-free and other foods will be significantly reduced in carbohydrates.

8. Can pregnant women use NutraSweet? On the basis of animal and clinical studies, Health and Welfare Canada concluded that NutraSweet does not present an additional risk to pregnant women. The amino acids from NutraSweet

will be less than 1% of the total protein consumed over a day. And, consuming foods and beverages made with NutraSweet is just like eating other foods containing the same protein components.

9. Does NutraSweet really taste like sugar? In two separate studies conducted at

a leading university in New York, people were fed a diet that contained sugar-sweetened foods. Occasionally, foods sweetened with NutraSweet were substituted without the subjects' knowledge. Most subjects could not tell the difference between the foods sweetened with NutraSweet and the same foods sweetened with sugar.

10. Can NutraSweet help me control my weight? Eating foods made with NutraSweet allows you to reduce your daily calorie intake, yet still satisfy your sweet tooth. And because foods made with NutraSweet taste like high-calorie foods, they can help make even a restrictive diet more palatable.

*NutraSweet is a brand name of G.D. Searle & Co. for the sweetener aspartame (APM).

**NutraSweet contains phenylalanine. Physicians with phenylketonuric patients may request additional information on foods made with NutraSweet by calling (1-800) 268-1120 and in British Columbia (112-800) 268-1120.

***Copies of this study may be obtained by calling the 800 telephone number mentioned above.

©1982 G.D. Searle & Co.

Compare the difference in calories:

Food	Containing Sugar	Containing NutraSweet
Hot chocolate (8 oz.)	116 calories	64 calories
Carbonated soft drink (10 oz.)	120 calories	1 calorie
Gelatin dessert (½ cup)	81 calories	10 calories
Whipped topping (4 Tbsp.)	56 calories	28 calories
Chocolate pudding (½ cup)	150 calories	75 calories
Milk shake (1½ cups)	284 calories	135 calories

The NutraSweet Breakthrough

TODAY'S COLGATE: TWO FLUORIDE REMINERALIZATION.

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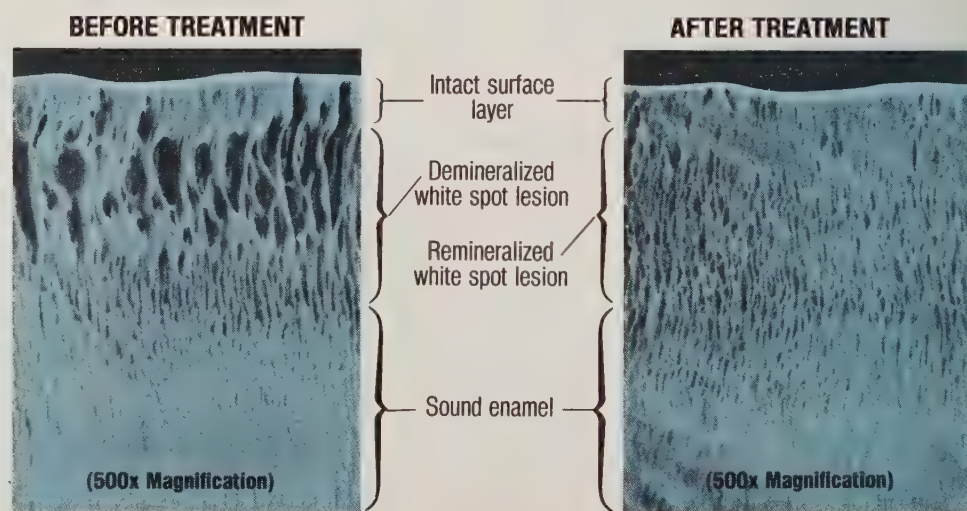
REMINERALIZATION.

Remineralization is the reversal of the demineralization process before a white spot lesion becomes a cavity (1). Studies have indicated that the presence of fluorides in demineralized enamel improves the natural remineralization process (2-5).

COLGATE'S TWO FLUORIDE STUDY.

In vitro studies (6) on demineralized enamel show that treatment with Colgate's combination of sodium monofluorophosphate and sodium

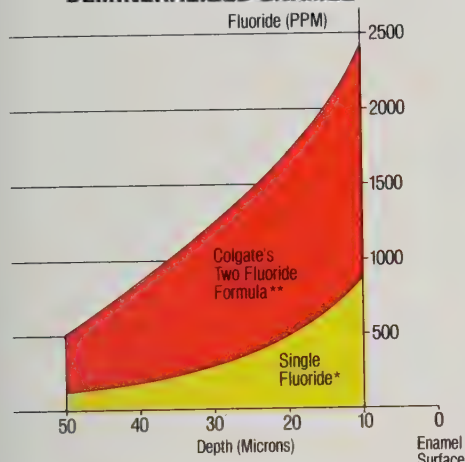
fluoride** actively promotes more complete remineralization of white spot lesions than a single fluoride formulation.* This improved remineralization of white spot lesions, we believe, ultimately leads to a greater reduction in cavities.



HOW TWO FLUORIDES REMINERALIZE MORE COMPLETELY.

Laboratory research shows that Colgate's combination of sodium monofluorophosphate at 0.76% and sodium fluoride at 0.10% delivers significantly more fluoride deeper into demineralized enamel, thus providing superior conditions for remineralization.

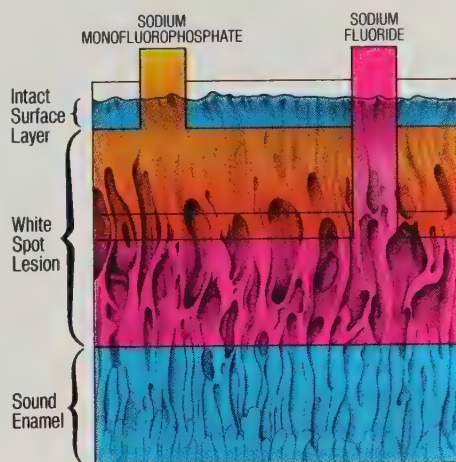
FLUORIDE UPTAKE BY DEMINERALIZED ENAMEL



Within the white spot lesion, sodium monofluorophosphate remineralizes enamel primarily at the surface while sodium fluoride penetrates deeper to remineralize sub-surface regions. This combined remineralizing action

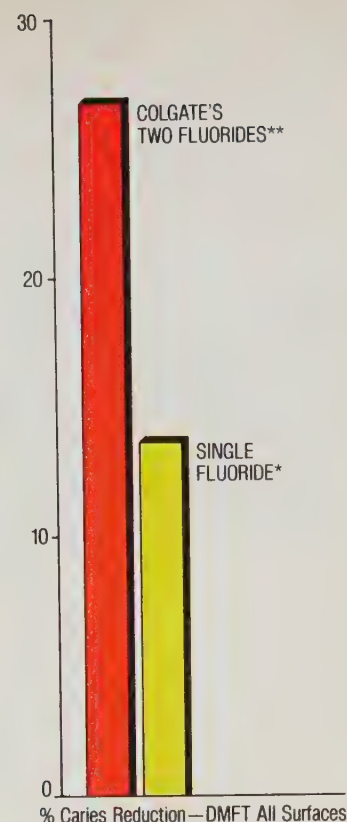
of Colgate's two fluoride formula promotes more complete remineralization of white spot lesions than a single fluoride formulation*.

REMINERALIZATION ACTION OF COLGATE'S TWO FLUORIDES



COLGATE'S CLINICAL PROOF.

The results of a three year clinical study (7) show that Colgate's combination of two fluorides provides significantly greater reduction in caries. In vitro research indicates that this results from more complete remineralization of white spot lesions before they progress to cavities.



IS THIS PART OF YOUR OHI?

We believe that Colgate's two fluoride formula is an innovation in preventive dentistry. By including Colgate in your Oral Hygiene Instruction, you will be recommending cavity protection that you can trust.

REFERENCE

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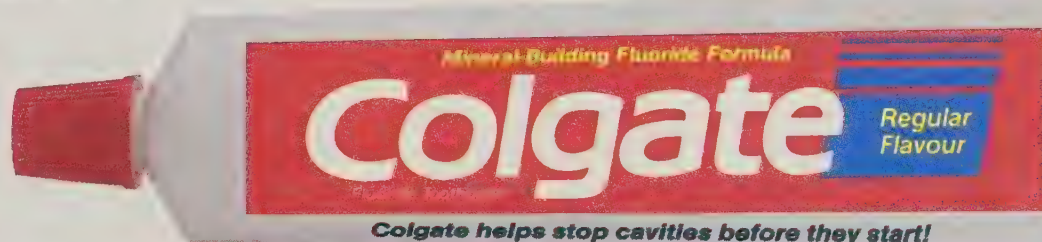
* Sodium monofluorophosphate (0.76%)

** Sodium monofluorophosphate (0.76%) and sodium fluoride (0.10%)



+ "Colgate Toothpaste contains sodium monofluorophosphate and sodium fluoride which are, in our opinion, effective decay preventive agents and are of significant value when used in a conscientiously applied program of oral hygiene and regular professional care."

Canadian Dental Association



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See prescribing information on page 637

Further comment about fluoride varnishes

This letter is in reference to a paper by Yanover titled, "Fluoride Varnishes As Cariostatic Agents: A Review," which appeared in the June issue of the Journal. It is encouraging to see further attention given to this promising preventive agent. Concurring with Dr. Yanover, I think that fluoride varnishes are perhaps the most practical and effective professionally applied topical fluoride procedure available for use in Canada. This opinion was formed after reviewing the subject for the protocol of the Sherbrooke Fluoride Varnish Study. This review of the literature was published in the June 1982 issue of Community Dentistry Oral Epidemiology. I am pleased to report that the Sherbrooke Study was funded by the Medical Research Council of Canada in June 1981 and that the first year of treatments has been completed by a team of energetic dental hygienists under the supervision of Dr. Guy Robert, Chargé de programme en santé dentaire, in Sherbrooke, Quebec. Hopefully the results of this study will again demonstrate the improved effectiveness of this procedure. Because of my knowledge and experience with fluoride varnishes, I would like to share with the profession some of my observations and perhaps supplement and further clarify some of the points made in the forementioned article.

Dr. Yanover attributes the apparent improved effectiveness of fluoride varnishes to "their ability to prevent occlusal decay" and to the stability and penetration of fluoride in the outer surface of enamel one week after treatment. I think that it is important to note further that increased fluoride uptake has been observed in the outer surface of enamel up to six months after treatment (Bruun, Givskov and Stoltze, Caries Res., 14: 103-9, 1980). In this vein, Dr. Yanover states that fluoride varnishes "leave a high concentration of fluoride ion in the outer enamel," but states further that "this in itself is not important since there is no simple relationship

between enamel fluoride deposition and dental caries." This point, although scientifically correct, may be misleading to most readers. The rather weak correlation between the concentration of fluoride in the outer surface of enamel in teeth and caries prevalence points to the complex interaction of factors that contribute to dental caries, and perhaps the inability of scientific investigation to identify a strong to moderate association if one were to exist. Regardless, the profession should accept conventional wisdom in this instance, and continue to use topical fluoride procedures that incorporate high levels of fluoride on the outer surfaces of enamel.

The practicality of fluoride varnishes is also alluded to by Dr. Yanover. Based on the extensive experience of the dental hygienists in Sherbrooke, I think that Dr. Yanover's time estimate of five minutes per treatment is overly optimistic. Traditional application procedures in the

Journal covers

I enjoy the cover illustrations on the Journal, but I do wish there was some description of who took them, where they were taken (like the June '82 issue) and what they depict.

I always search the masthead of each Journal, but I am never successful.

Hal E. Leyland, DDS,
Nassau, N.P. Bahamas.

Editor's Note: The photographer is a talented photo-journalist and the Journal's Associate Editor, Mrs. Heather Lang-Runtz. She has a good eye for composition and, as a conservationist, is particularly attracted to the beauty of unspoiled countryside vistas. On the June cover, she captured on film one of the last steam trains operating in Canada on an excursion run in a rural setting near Ottawa. Occasionally transparencies that have potential as cover illustrations are contributed by readers across Canada.

Sherbrooke Fluoride Varnish Study average about twenty minutes per child depending on cooperation and operator experience. The average number of children treated after self-brushing estimated from 30 to 35 per hour is again perhaps misleading. Like many procedures in dentistry, few good short-cuts exist, and until these group procedures are confirmed and supported by reputable research, the procedure in my opinion should not be advocated.

One additional comment concerning the clinical studies of fluoride varnishes presented by Yanover in Table I is perhaps needed. It is impossible to identify the particular study that corresponds to the data presented in Table I. For example, study 24 in Table I references a review article, and most likely refers specifically to the results of a study by Murray *et al*, listed as reference number 6 in the bibliography. The confusion continues as a paper by Retief *et al* (study 14) reports clinical effectiveness. However, Retief, Sorvas and Bradley were studying fluoride varnishes *in vitro*. This type of data presentation is of questionable scientific value and consequently detracts from the credibility of the Journal.

D. Christopher Clark,
BS, DDS, MPH
Montréal, Québec.

Vintage automobile

Re: Automobile, Cover JCDA, Vol. 47, No. 11, November 1981

The vintage auto displayed on the above captioned issue of the Journal has captured my imagination, but I cannot place the make or year.

Would you kindly find out what ever information is available on the car and send it to me? I would be most grateful if I could correspond with the owner and determine if the car is for sale.

Waiting in rapt anticipation I remain,

Dr. R.D. Clarke
Nelson, B.C.

A Debt to Repay — A Bet on the Future — CFDE

It is a privilege to be a member of the dental profession and each one of us is indebted to those individuals and institutions that have contributed to our education. Through our support of the Canadian Fund for Dental Education, we can partly repay that debt, acknowledge the benefits we have received from dental education in the past and invest in the future as we demonstrate our concern for the quality of teaching that is being received by our present and future colleagues.

The Canadian Fund for Dental Education has grown tremendously since it began in 1963, a growth which has made it possible for the Fund to invest more than \$1.5 million to promote top quality dental health care. Investment in specific programs has already been a benefit to dentistry and will continue to be in the future.

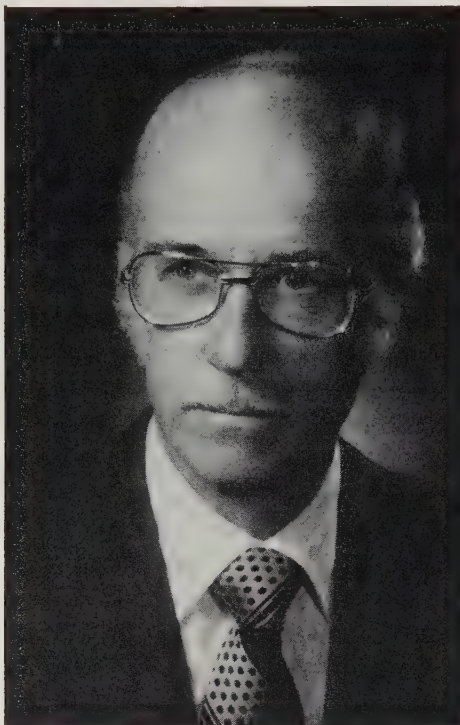
The Fund provides money for dental research, student conferences, teacher training fellowships, and a variety of other projects that in some measure continue to touch every dental school, student, practising dentist and dental patient in this country.

Since the Fund began almost two decades ago, 72 cents of every dollar received has been invested in dental education and research, endowment funds or reserves. The remaining 13 cents has gone to fund-raising costs, and 15 cents has covered general management and program services.

Fellowship assistance

One of CFDE's top priorities continues to be fellowship assistance. In 1981, the Fund allocated \$52,142 in Teacher Training Fellowships alone.

In addition, CFDE contributes financially to dental education through other types of grants and scholarship



Dr. James A. Guest

awards. Last year, money was set aside for the following projects: \$15,000 to the dental schools across Canada; a \$14,310 grant for student table clinics and the Canadian Dental Students' Conference; \$9,625 to the Lorne E. MacLachlan Endowment-Teacher Training Awards; \$6,000 for the dental teaching conference; and \$4,500 in scholarships to dental students. A further \$3,827 was allocated for the completion of the research project at the University of Toronto, sponsored by the Hospital for Sick Children Foundation, and \$6,513 went for sundry awards.

\$136,00 in awards

The CFDE trustees have approved awards for 1982 amounting to \$136,000, a 22 per cent increase over the 1981 figure. Included in this is support for the biennial conference on research and education and continuing support for the dental aptitude test interview validation study. The trustees believe this latter proj-

ect is an essential priority, enabling our faculties of dentistry to assure, through an interview process, that the best possible candidates are admitted, young people who are not only academically qualified, but possess qualities of heart and soul, character and integrity that are the hallmark of a true professional.

Last year's income, derived from gifts by business and industry, the dental profession, investments and dental organizations, soared to record highs. The income totalled \$238,978, which represents a \$25,774 increase over the 1980 income.

A significant number of dentists and auxiliaries continue to honor the memory of a deceased friend or relative through a donation to the Living Memorial Fund of CFDE. Surely an investment in the future is the most thoughtful tribute to the past. The names of individuals who are honored by your Living Memorial contribution are inscribed in the Book of Remembrance on display at CFDE headquarters and the In Memoriam card is sent to the family of the deceased.

New Category: 'Patrons'

In recognition of those voluntary contributions from dentists totalling \$200 or more, the Fund established a new category called "Patrons." Fifty-five dentists were designated under this category last year, 246 dentists were listed as honor members, while hundreds more contributed smaller amounts.

This expression of confidence in the Fund's ability to promote and support dentistry in Canada is encouraging.

As I come to the end of my term as Chairman of the Board of Trustees, I

(Continued on next page)

B.C. dental plan victim of fiscal restraint

British Columbia's Dental Care Plan has succumbed — a victim of the B.C. government's fiscal restraint policy.

The cut-off date was September 1. "We're quite disappointed that the government saw fit to take that action," said Dr. Ronald Markey, President of the College of Dental Surgeons of B.C. When it became apparent the Plan would be lopped, the College met with Health Minister James Nielsen on several occasions to urge him to "trim" rather than suspend the Plan entirely.

The Plan has been suspended for the duration of the provincial fiscal restraint period, which, Dr. Markey said, will continue for two years.

"Strictly speaking, they've put it in mothballs for two years. They're call-

ing it a suspension, not a cancellation," he said. However, he said he is skeptical about the definition.

Fees-for-services also trimmed

All health professionals which have agreements with the Ministry of Health, including the College of Dental Surgeons, have been asked to accept a voluntary rollback of fees, from 12 per cent to six per cent, for services performed in hospitals. This rollback also became effective September 1.

The Ministry has honored its original agreement to pay the 12 per cent increase, signed last March, from April 1 to August 31. The government had been withholding 10 per cent of this negotiated increase, pending its decision about how drastic the provincial fiscal restraint measures should be.

Welfare recipients still covered

The Plan originally provided coverage for dental services for children 14 and under, senior citizens 65 and over, low income earners entitled to premium assistance, and welfare patients.

Only those on welfare, who were covered through the Ministry of Human Resources, will retain their coverage.

There were, however, some major gaps in the Plan's coverage, according to Ken Croft, Managing Director of the College. "The bulk of the labor force was not covered," and a large majority of B.C. children were covered under private dental plans.

The Plan came into effect in January, 1981. The College had fought for it since 1978.

A Debt to Repay (Cont'd)

must confess to a continuing concern over the fact that the Fund receives financial support from a relatively small percentage of Canadian dentists. I am continually encouraged by the fact that the size of gifts has risen significantly over the years and the trustees are truly grateful for this generous support. But I believe CFDE deserves the support of every dentist in Canada. Much has been accomplished in the past, but so much more could be done as a result of greater participation.

CFDE's continuing goal will be the advancement of the standards and prestige of dentistry and the promotion of a constantly improving level of dental health care. The trustees have great expectations for the future and I am sure that the generosity of the dental profession in Canada will match their expectations and help them to fulfil them.

October is CFDE Month, an opportune time for each member of the

dental profession to enhance his profession by making a generous contribution to the Canadian Fund for Dental Education. Your support will be as much appreciated as it is needed.

Please direct funds to: 44 Eglinton Ave., West, Toronto, Ont. M4R 1A1.

*James A. Guest, DDS
retiring chairman,
CFDE Board of Trustees*

CDA Retirement Savings Plan

Unit values of the Canadian Dental Association's Retirement Savings Plan stood as follows on August 31, 1982.

<i>Common Stock Fund</i>	\$51.1399
<i>Fixed Income Fund</i>	\$29.6552
<i>Guaranteed Fund</i>	\$24.2083
<i>Balanced Fund</i>	\$11.1450

Total assets (market value) of the plan were \$30,453,622.

The previous month's figures, as of July 31, 1982, stood as follows:

<i>Common Stock Fund</i>	\$45.8813
<i>Fixed Income Fund</i>	\$28.1830
<i>Guaranteed Fund</i>	\$23.9132
<i>Balanced Fund</i>	\$10.3018

Total assets (market value) of the plan were \$28,658,959.

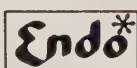
For further information write to: Canadian Dental Service Plans Inc., Ste. 600, 2 Lansing Square, Willowdale, Ontario M2J 4Z3 or call the central information services of CDSPI At 1-800-268-5418 (497-7171 in Metro Toronto).



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*T.M.

PRECAUTION This product has the potential for being abused.

Prescribing Information

INDICATIONS: Relief of moderate to moderately severe pain (Percocet), or relief of mild to moderate pain (Percocet-Demi), with or without fever, especially in patients who are allergic to acetylsalicylic acid or for whom acetylsalicylic acid is contraindicated.

CONTRAINDICATIONS: Status asthmaticus, pre-existing respiratory depression or convulsive states, hypersensitivity to oxycodone, acetaminophen, or caffeine. Unlike acetylsalicylic acid, acetaminophen is not contraindicated in patients with peptic ulcer or gout.

WARNINGS: Oxycodone can produce drug dependence of the morphine type and has the potential for being abused. Psychic dependence, physical dependence and tolerance may develop upon repeated administration, as with other oral narcotic medication. May impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as driving a car or operating machinery. Patients should be cautioned accordingly. Additive CNS depression may occur in patients receiving other narcotic analgesics, general anesthetics, monoamine oxidase inhibitors, tricyclic antidepressants, phenothiazines or other tranquilizers, sedative-hypnotics or alcohol. If combined therapy is contemplated, the dose of one or more of the agents should be reduced. Safe use in pregnancy has not been established relative to possible adverse effects on fetal development, therefore Percocet or Percocet-Demi should not be used in pregnant women unless, in the judgment of the physician, the potential benefits outweigh the possible hazards. The administration of Percocet or Percocet-Demi to obstetrical patients in labor may be associated with respiratory depression of the newborn. Percocet should not be administered to infants or children, although Percocet-Demi may be considered for children of six years or older.

PRECAUTIONS: The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of **head injury**, other intracranial lesions or a pre-existing elevated intracranial pressure. The diagnosis or clinical course in patients with **head injuries** or with **acute abdominal conditions** may be obscured by narcotic drugs. Give cautiously to **elderly or debilitated** patients due to the risk of cardiac or respiratory depression, as well as to patients with hemorrhage, severe impairment of hepatic, respiratory or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture. Narcotic analgesics should only be employed for the treatment of **headaches** when no other treatment is effective, in order to minimize risk of psychological and physical dependence.

ADVERSE REACTIONS: Light-headedness, dizziness, sedation, nausea and vomiting may occur, as well as euphoria, dysphoria, constipation and pruritus.

DRUG INTERACTIONS: May be additive with other CNS depressants.

MANAGEMENT OF OVERDOSAGE: Signs and symptoms: Respiratory depression, extreme somnolence progressing to stupor or coma, skeletal muscle flaccidity, cold and clammy skin, and sometimes bradycardia and hypotension. In severe cases, apnea, circulatory collapse, cardiac arrest and death may occur. Acute acetaminophen intoxication is characterized by anorexia, nausea, vomiting and sweating within two or three hours of ingestion, and possibly cyanosis with methemoglobinemia, enlargement and tenderness of liver, accompanied by abnormally high liver function tests, occur within 48 hours, followed by jaundice, coagulation defects, myocardiopathy, encephalopathy, renal failure and death due to hepatic necrosis. A dose of 10 g of acetaminophen is intoxicating, possibly fatal in excess of 15 g. Hepatic toxicity occurs when the plasma levels reach 300 µg/ml within four hours of ingestion. **Treatment:** Re-establish adequate respiratory exchange. Naloxone, nalorphine or levallorphan are specific antidotes against narcotic-induced respiratory depression. An appropriate dose of antagonist should be administered preferably intravenously, and repeated as needed to maintain adequate respiration; the patient should be kept under continued surveillance. Instructions in the package insert provided by the manufacturer should be carefully followed. Do not administer an antagonist in the absence of clinically significant respiratory or cardiovascular depression. Employ oxygen, intravenous fluids, vasopressors and other supportive measures as indicated. Gastric emptying by emesis or lavage may be helpful. Hemodialysis carried out within ten hours of ingestion may be of some value. Plasma levels of acetaminophen should be determined.

DOSAGE AND ADMINISTRATION: **Percocet Tablets:** Usual adult dose is one tablet every six hours as needed for pain.

Percocet-Demi Tablets: Usual adult dose is one or two tablets every six hours. Children twelve years and older: half a tablet every six hours. Children six to twelve years: a quarter of a tablet every six hours. Not indicated for children under six years of age. Dosage should be adjusted according to the severity of the pain and the patient's response.

DOSAGE FORMS: **Percocet Tablets:** Bottles of 40, 100 and 500 white, scored tablets, each containing oxycodone hydrochloride 4.5 mg, oxycodone terephthalate 0.38 mg, acetaminophen 325 mg, caffeine 32 mg.

Percocet-Demi Tablets: Bottles of 40, 100 and 500 blue quadrisected tablets, each containing oxycodone hydrochloride 2.25 mg, oxycodone terephthalate 0.19 mg acetaminophen 325 mg, caffeine 32 mg.

Complete prescribing information available on request.

Reference

1. Chasko, W.J.: Pain-free dental surgery: Post operative extension of the pain-free state. J. DC Dent. Soc. 1956.

MEMBER

PMAC

PAAB

WARNING!

ALL APEX LOCATORS ARE NOT NEOSONOS X-RAYS ARE WRONG—NEOSONO IS RIGHT

The principle behind all electronic apex locators is the same. This principle, published by Sunada in 1962, showed that the electrical resistance of the periodontal ligament has a constant value. Electronic apex locators attempt to measure electrical resistance in a root canal and compare the resistance to a reference value. However, there are hundreds of possible circuits that can attempt to measure the small changes in resistance over a distance of one-tenth of a millimeter. Only the Neosono line circuitry has been clinically tested over an 11 year period. In these studies the canals were often measured both by x-ray and with our apex locator. The teeth were then extracted with the reamer in place. The accuracy was found to approach 100% in the studies. In one study published in the Journal of Endodontics the device was 100% accurate, while x-rays were wrong 37% of the time in the root canals. Other apex locators use simplified, less sophisticated, circuitry which may be capable of providing resistance measurements to estimate the length in certain cases, such as when the canal is completely cleaned and dried. Compare this situation to the Neosono circuitry which was shown in a clinical study published in "Triple O" to produce 100% accuracy without removal of the pulp or drying the canal. Imitation units have been unable to produce any comparable clinical studies. The Neosono circuitry is sophisticated enough to screen out the complex electrical signals present if pulp or debris is present.

What are some of the unique features of the Neosono, developed over the last 12 years, that imitators don't provide?

	Neosono	Imitators
1. Published clinical studies (11) proving accuracy.	Yes	No
2. Published studies showing accuracy with pulp present.	Yes	No
3. Provide the distance, in tenths of a millimeter, from apical foramen.	Yes	No
4. Ability to set circuit to stop at preset distance (e.g. 1/2mm short), not just a range of 1 mm.	Yes	No
5. Ability to get exact length without looking at device via audible signal (visual reading also available).	Yes	No
6. Different audible and visual signal if reamer passes apex. Avoids overinstrumentation.	Yes	No
7. Ability to obtain length with nothing attached to reamer.	Yes	No
8. Avoid calibrating unit each time device is used.	Yes	No
9. Ability to compensate for variations in patient resistance.	Yes	No
10. Does not require large, cumbersome lip attachment (miniaturized ground).	Yes	No
11. Does not require electrical isolation of patient from chair, etc.	Yes	No
12. Made and serviced in U.S.A. by manufacturer.	Yes	No
**13. Models with all 12 unique features above starting at \$379.	Yes	No



Plus—The NEOSONO-D with

14. Ability to read the distance from apical foramen directly on a screen in millimeters (to 1/10th mm).	Yes	No
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imitation may be the most sincere form of flattery, but we are not flattered when people are confused and disturbed by the poor performance of limitations, especially since we have spent 11 years perfecting the real thing.

Now available new accessory for Neosono. Plastic insulating sleeve simplifies use on teeth having metallic restorations.

To receive some of the 11 published clinical studies call Sales department collect (609-429-8297) or write amadent, Box 422, Cherry Hill, N.J. 08034.

Ask about our unique trade in program on all apex locators. Units priced from \$379.00

Journal of Endo., Vol. 2, No. 7, July 1976, p. 215
Oral Surgery, Oral Medicine, Oral Pathology, Vol. 38, No. 3, Sept. 1974, pp. 469-473

Also see "joltless" pulp tester, Madajet, and new Adalite fiberoptics to attach to your handpiece at the American Dental Association Meeting, Booths 336, 2225, 1629, 154, and at every national, state, local and Canadian convention. See programs for booth numbers.

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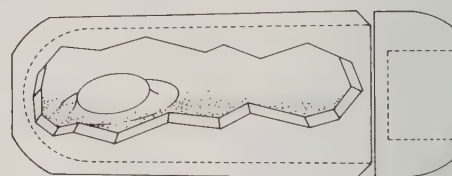
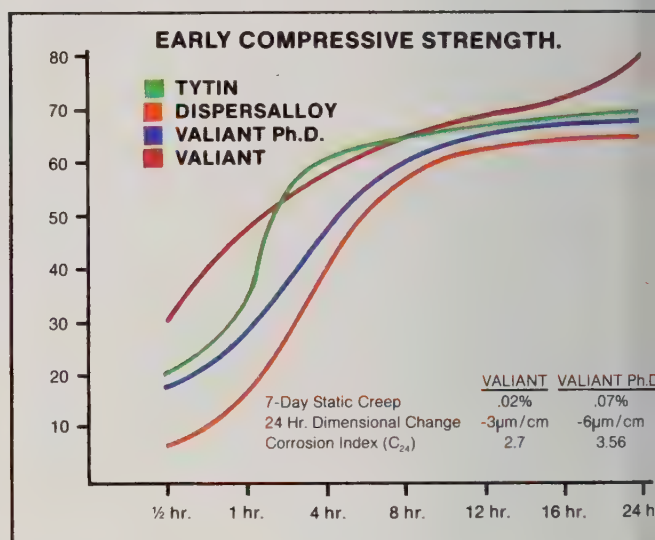
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palladium-enriched for high early
strength, complete elimination of
corrosive Gamma II phase.

Since its introduction, "the noblest amalgam alloy of them all" has achieved outstanding clinical success and remarkable professional acceptance. Its one-component formulation offers a firm, but *super-smooth* carving and burnishing surface . . . the "CREAMY" sensation that many professionals have come to prefer.

"The alloy that thinks it's an inlay"

Palladium, the lightest member of the platinum family, has long been used in dental casting alloys to impart strength and enhance corrosion resistance. Now, in VALIANT®, CAULK® has been able to impart the same benefits by adding a small but significant portion ($< 1\%$) of precious palladium.

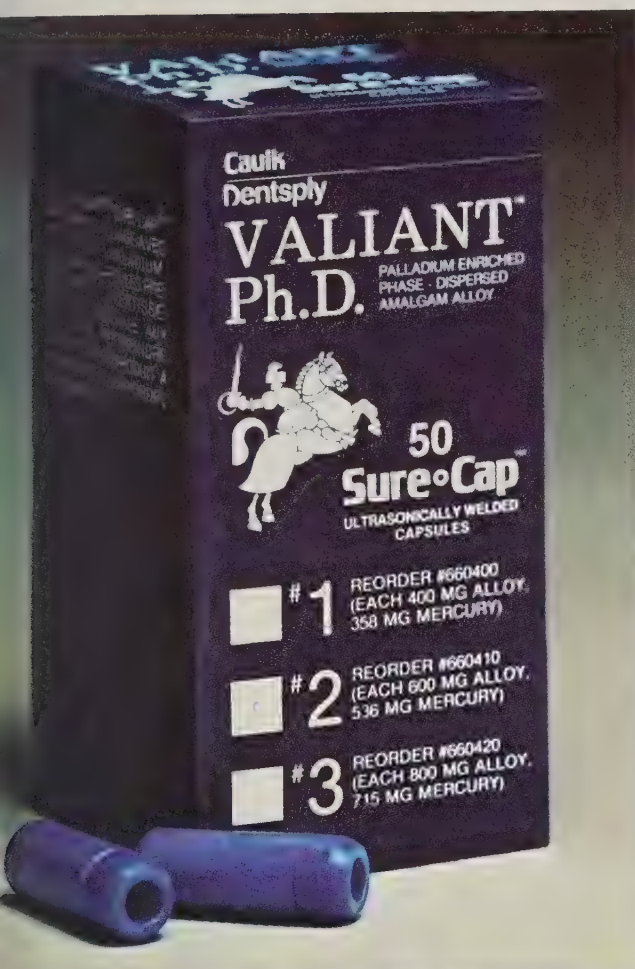
The graph below demonstrates the significance of high early strength. The sooner the amalgam mass reaches a PSI of 30,000, the lower the risk of marginal fracture.



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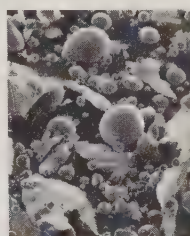
The SURE-CAP ultrasonically welded capsule offers decided working advantages: no manual activation, no pestle, reduced risk of mercury leakage. Reduction of the risk of mercury vapor contamination during storage and trituration helps keep the mercury level in your working environment below the (TLV) Threshold Limit Value (0.05 mg./m³) determined to be safe by OSHA act of 1970.

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Achievements of CDA's Councils during 1981-82

President's message



The expertise and wise counsel of the chairman and members of the CDA Councils and committees, and their dedication to the achievement of

professional excellence, provide me, as your new president, with complete confidence that the CDA will continue to serve Canadian Dentistry in the best possible manner during the coming year.

I look forward to working with all Council and committee members in continuing to improve organized dentistry in Canada.

— Dr. W.R. Thompson

Council on Dental Materials and Devices

The main thrust of activities of the council is in the establishment of a standards-writing and certification program for dental materials used in Canada. To achieve this, council members are active in the standards writing process both at the international level as delegates to the International Organization for Standardization (ISO) and at the national level as members of the Canadian Standards Association (CSA) technical committee on dentistry. Meetings of these two organizations are attended by council members and a comprehensive report of these activities has appeared in the August 1982 issue of the *Journal* (pages 523 — 528).

The council is the trustee of the Canadian Dental Research Foundation (CDRF) and, as such, selects the recipient of the CDRF Award which is presented to a young researcher

The various councils of the Canadian Dental Association — Constitution and By-Laws, Dental Materials and Devices, Education, Ethics, Health Care, Hospital Services, Information Services, Nominations, Insurance and Investment and Student Affairs — have been heavily involved in the past year in deliberations, finding solutions and making recommendations, on matters of vital interest to everyone in the dental profession in Canada.

Chairmen and representative members of these councils have been invited by the CDA Journal to submit brief reports outlining achievements and activities of their councils during the year.

Their comments follow.

working in a Canadian university. This year's recipient was announced at the September Board of Governors meeting in Ottawa.

The council has also very active liaison with Health Protection Branch in Ottawa, the Advisory Commission on Medical Devices and the American Dental Association's councils. It also acts as consultant and as a clearing house on questions brought to the Association on dental products and devices.

— Dr. Ralph Y. Barolet

Nominations

All elective offices and vacancies for the 1982-83 term have been filled by eligible nominees. Elections were held during the annual meeting of the Board of Governors, in Ottawa, Sept. 24-25.

The call for nominations format was amended to reflect the change in CDHA and CDAA representation to the Councils on Education and Health Care.

Past-President's tribute



The few lines prepared by CDA Council chairmen and presented here, represent the end product on only a few of the many subjects the councils deal with

annually. These reports do not reflect the number of dentists or the hundreds of hours they have contributed freely to make our Councils effective.

Your president is accorded a high profile over the year, but without the support of these willing volunteers, the president's tasks would be impossible and the CDA could not fulfil its mandate.

— Dr. Donald E. Williams

The nominations form was revised to provide for identification of the corporate body in which the nominee holds membership.

— Dr. G.E. Utas Council on Student Affairs

During the past year, the Council on Student Affairs has been increased from six members to 14, and now represents all Canadian faculties of dentistry.

The Council's projects have included the operation of the CDA student membership campaign, the development of a manual on graduate, post-graduate, internship and residency programs, the completion of a student representative manual, the initiation of a practice administration manual for new dental graduates and the development and publication of a twice-yearly student newsletter.

The next Council meeting will be held in conjunction with the 1982 Canadian Dental Students' Confer-

(Continued on next page)

ence at the University of Western Ontario, in London, Ontario, October 6—9.

— Dr. Peter Judd

Council on Constitution and Bylaws

The Council has been carefully reviewing the CDA's Constitution and By-laws and, with the advice of a legal counsel, has prepared a revised version for consideration. This has been sent on to the Board of Governors for their views and copies have also gone to the Corporate members as information.

Chairmen of the various councils have received the sections of the By-laws pertinent to the jurisdictional areas of their Councils and they have been invited to provide comments.

The Council has planned to consider all the submitted comments at a meeting this fall. Following that meeting, this Council will prepare a revision to present at the March 1983 meeting of the Board of Governors.

— Dr. Donald MacDougall

Council on Hospital Services

In recent meetings, the Council has developed an accreditation classification to allow specificity and yet incorporate flexibility into a more standardized assessment of hospital dental services. It is felt that this classification, which allows for either Provisional, Conditional or Full Approval of the assessed facility, will ultimately pave the way for reciprocal acceptance of CDA accreditations by the American Dental Association.

Since no Canadian standards have been set for the use of unsaturated chemical vapour sterilizers in hospitals, the Council has begun investigating this methodology in detail. This technique, which significantly reduces the corrosion on carbon steel cutting edges produced by methods which create extensive water vapour, is particularly suited for many dental instruments in common use.

In an effort to help prepare administrators of General Practice Residency and Internship Programs for accreditation surveys, the Council is developing a self-study manual. This

volume will additionally allow for on-going peer review within the programs by their departmental staff.

The Council has spent considerable time and effort reviewing and assessing current procedures for conducting accreditation surveys. A dramatic increase in the number of hospitals requesting a first survey, as well as a considerable number of hospitals which require resurveying, has produced a large and potentially expensive backlog. Modifications in the survey programs will likely standardize survey timetables and team membership.

Other topics under discussion include CDA membership on the Canadian Council on Hospital Accreditation, dental requirements in long-term care institutions, and the responsibilities of hospital-based dentists as outlined in provincial Hospital Acts.

— Dr. J.H. Gryfe

Council on Information Services

The 1982 National Dental Health Month campaign was very successful. An additional 240 dental health month kits were distributed this year to provincial associations and other organizations, poster distribution was up from 1982, six provinces participated in the national poster contest, NDHM was promoted by Holiday Inns and McDonald's restaurants across Canada and more than 100 newspaper clippings, many incorporating CDA material, had been assembled by June.

Media workshops were conducted in Ottawa and Winnipeg, and the Atlantic provinces were expressing interest in taking the course.

CDA, during the year, was distributing close to half a million English and French pamphlets.

— Dr. Y. Kamachi

Council on Insurance and Investments

Because the Council's main purpose is to develop, maintain and improve insurance programs for the profession, many Plan improvements were made and announced, among which were the following:

1) Effective January 1, there was a

10 per cent increase in coverage in the Basic Life Plan with a corresponding 10 per cent decrease in life insurance premiums. The insurance increase was without any medical evidence. The maximum basic life coverage was also increased to \$370,000;

2) Long-Term Disability Insurance was increased to a maximum of \$4,000 and a cost-of-living allowance of 10 per cent was available effective January 1, 1982. In addition, there was a promotion to permit eligible participants to receive additional Long-Term Disability or Office Overhead Insurance in the amount of \$500 without any medical evidence;

3) Office Overhead Insurance maximum was increased to \$6,000 effective January 1, 1982;

4) An automatic 10 per cent inflation-proofing increase was made available to all participants July 1, 1982 relating to Office Contents coverage;

5) The 1982 Graduate Package coverage was upgraded relating to the maximum of coverage, in order to keep pace with inflation;

6) The investment management of the Registered Retirement Savings Plan was consolidated and is now under the control of the Trustee, and examination by CDSPI.

— Dr. J.E. Durrant
President, CDSPI

Council on Health Care

During the past year, the Health Care Council has adopted a nine-digit numbering system to replace the very controversial social insurance number that was on the Dental Claim Forms. This number not only identifies the dentist numerically, but also provides information as to the province in which he practises, his specialty and the type of membership in the Association.

The Radiation Protection Committee, a sub-committee for the Health Care Council, chaired by Dr. Robert Janes, has developed "Guidelines for the Control of Radiation in the Dental Office." Another function of this

Council is the assigning of procedural code numbers used on Dental Claim Forms. Each year, as new dental procedures are developed, new code numbers are assigned based on a logical five-digit system.

The Council is also updating "Guidelines for Dental Health Plans for Children" which was presented at the September Board of Governors meeting. The Health Care Council, in co-operation with the Council on Information Services, has made arrangements to have an article produced on nutrition and prevention as it pertains to dentistry with the magazines *Baby Talk* and *Best Wishes*. These magazines are given to all new mothers at most hospitals in Canada. It is estimated that more than one-quarter million new mothers receive these magazines. We feel this is an ex-

cellent vehicle in which to create an awareness in the new mother of the role she can play in promoting the future of good dental health when her child is still an infant.

— Dr. H.H. Horsman

Council on Education

This Council continues to recognize and carry out to the best of its ability its responsibilities, especially in the area of accreditation. Steps are being taken to ensure that all existing guidelines and documents are current, and the Council welcomes constructive suggestions aimed at improving the accreditation process.

Our Dental Admissions Test Committee has been particularly active this past year. An Interview Validation Study Project is underway to develop a standardized interview for use in the dental admission process. The

Committee is also studying the correlation of students' test results with their performances once they have been accepted into dentistry. In order to keep dental faculties presently involved in the interview study abreast of interview techniques, the Committee has established a schedule of re-training workshops at two-year intervals.

The standing Committee on Continuing Education, a new committee of the Council, has been formed to consider the roles of the CDA in continuing education and to make recommendations on matters pertaining to these roles, and to undertake studies and projects in order to assist the CDA in determining and fulfilling its roles in continuing education.

— Dr. D. Yeo

What the CDA means to specialty groups

Chairmen and representative members of the various specialty groups within the framework of the Canadian Dental Association were recently invited to respond to the question: "What does the CDA mean to your specialty group?"

Responses to that question have been published below.

The Canadian Society of Public Health Dentists

While it is very difficult for any association, especially one on the national level, to be all things to all people all the time, it is my hope that members of the public health specialty section reinforce and maintain membership within the Canadian Dental Association.

Our new Canadian Constitution will no doubt in the years to come change the very essence of the right of provincial legislatures to delegate the licensing of dental practitioners to provincial bodies, and the right of freedom of movement and to work in any province in Canada, will certainly emerge.

I hope that when this occurs, that

public health dentists true to the CDA will have a strong voice in setting the new ground rules and that the public interest will be protected. You can ensure that this happens by joining and remaining involved.

— Dr. T.M. Curry

Canadian Academy of Paedodontics

The Canadian Academy of Paedodontics is grateful to CDA for its assistance in sponsoring the 6th International Congress of Dentistry of the Handicapped in the summer of 1981, and its help in sponsoring the 4th Canadian Congress of Dentistry for Children. In addition, CDA's accreditation of the paedodontic programs (graduate programs) at the University of Toronto assures high standards in that specialty area. Paedodontists are also appreciative of the articles in the CDA Journal germane to the practice of paedodontics.

— Dr. Howard Stein

Canadian Association of Orthodontists

Among the benefits to our association of affiliation with the CDA

is the accreditation. This ensures high standards of education for graduates in our specialty. CDA also provides an insurance coverage to orthodontists that would be difficult to get otherwise. The orthodontists are too small a group to do any effective lobbying against detrimental taxes or tariffs. We need some help from CDA in those areas.

— Dr. J.L. Ares

The Association of Prosthodontists of Canada

The Association of Prosthodontists of Canada sees the CDA as the avenue through which to express the national interests of the specialty. It sees itself as having a responsibility to respond to CDA requests for advice on matters pertinent to Prosthodontics. It believes that the CDA must recognize that a considerable amount of dental care is rendered by specialists and there is a considerable number of specialists in Canada. CDA should therefore be the medium for communications among the specialties and between the specialists and general practitioners. Specialties were

(Continued on next page)

created in the public interest. CDA sections provide a home for the specialties within the CDA structure. Continued services — communication, cooperation — will be required to maintain CDA as a unified voice for dentistry, both specialty and general, in Canada.

— Dr. Douglas Chaytor

Canadian Academy of Endodontics

Although the importance of the Canadian Dental Association has been grossly underrated in the past, dentists and specialty groups such as Endodontics should take a hard look at where we would be without this big brother to watch over our affairs. Right from the basic function of recognition of specialty groups up to the ongoing task of dealing with government and third party carriers, the parent organization is constantly acting quietly on our behalf. Dentistry and its specialty groups, would definitely not be in the enviable position it enjoys today without the Canadian Dental Association.

— Dr. Marshall Peikoff

Canadian Association of Oral and Maxillofacial Surgeons

In the last issue of the Canadian Association of Oral and Maxillofacial Surgeons (CAOMS), we read that all CAOMS members are CDA members.

Like all other CDA members, oral surgeons get benefits from negotia-

tions between the Association and the government (measures to fight inflation, professional standards, dental care for Inuits, etc.) and from its different committees (CDSPI, Taxation, Convention, Journal, Library, etc.).

Furthermore, oral surgeons involved in teaching appreciate the Council on Hospital Services accreditation program which maintains high standards for the residents programs and for dental health care.

"Strength through unity" is the password. And oral surgeons will need all the support they can receive from CDA, especially in 1986 when the IXth International Convention of Oral Surgery will be held in Canada.

— Dr. Huan Pham

Canadian Academy of Oral Pathology

In 1972, the Canadian Dental Association accepted proposals put to it by the Canadian Academy of Oral Pathology and recognized oral pathology as a dental specialty. The Canadian Academy of Oral Pathology is a small society composed of all the oral pathologists in the country, approximately 25, and a number of other dentists who have an interest in the discipline. It meets annually, usually in association with the American Academy of Oral Pathology, and concerns itself with all aspects of oral pathology in Canada. The practice of the specialty and education in it at undergraduate and postgraduate lev-

els are the chief areas of interest. A conference on teaching of oral pathology to undergraduates was held in Ottawa in early 1982 under CDA auspices. A set of guidelines was developed and submitted to the Council on Education. The Canadian Academy of Oral Pathology reports annually on all its activities to CDA, commenting on matters within its field of interest and sometimes making recommendations.

— Dr. J.H.P. Main

The Canadian Academy of Periodontics

Members of our specialty believe that matters of politics and close monitoring of federal government actions can best be accomplished by the Canadian Dental Association as a national entity. This contact and action against counter-measures on behalf of Canadian dentistry is becoming more and more important. We also feel that the Journal of the CDA offers good leadership and is a good vehicle for exchange of view and information of professional interest. It is doing a good job informing us what is happening in the other provinces of Canada. Articles on periodontology are of great interest to the members of our specialty.

— Dr. Harvey Freedman

The Canadian Academy of Oral Radiology

It is nice to have the specialty groups under the umbrella of the Canadian Dental Association and that it can be a mechanism for the interchange of information and concerns to and from the specialty groups to their colleagues in general practice.

It is probably a good idea that the specialty groups meet at the same time as the CDA meets, but in the case of our own group, Oral Radiology, the usual September meeting times are inconvenient because we are generally at the universities and that is our busiest period.

In short, benefits of the relationship outweigh any disadvantages that we may have.

— Dr. John A. Reid



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Invisible braces — not for everyone

Invisible braces or lingual appliances are not proving as popular as was expected.

It was originally believed that the braces, which are glued on the back surfaces of the teeth out of sight, would be especially popular with the adult orthodontic patient. Not so, says Dr. Eric Luks, a Toronto orthodontist who uses the appliances frequently.

"I don't think the lingual appliance is going to be a biggie in the marketplace. Invisible braces may bring in patients to the orthodontist who would not have come otherwise, but many of these patients will still end up

with 'outside' braces," said Dr. Luks.

What kind of people want invisible braces? "Mostly people in the public eye and professional women, such as lawyers," he said.

However, the braces are still being applied in only a very few cases. According to Dr. Luks, no more than 1,000 cases are presently being treated with lingual appliances in North America.

The appliances can be troublesome to both practitioner and patient. One of the main problems for the orthodontist, said Dr. Robert Hicks, president of the Canadian Association of Orthodontists, is that the appliances

are very difficult to place correctly on the teeth.

Because there is more work involved, the invisible braces are about 50 per cent more expensive than ordinary ones. "I would estimate that a major case would cost between \$4,000 and \$4,500," said Dr. Luks.

Besides being more time consuming and more expensive, lingual appliances are not the best treatment in some cases.

Invisible braces have been available in Canada for nearly a year. Orthodontists must take a course given by the manufacturer before they can fit the appliances on their patients.

Obituaries/Nécrologies

ARMSTRONG, T.E.: September, 1981. Dr. Armstrong, born on February 23, 1905, graduated from the University of Toronto in 1928. He was a Life Member of the CDA.

BLOOM, William: July 25, 1982. Dr. Bloom was born August 30, 1906. He graduated from University of Minnesota in 1933. He practised in Selkirk, Manitoba and Winnipeg. He was a life member of the Manitoba Dental Association and the Alpha Omega Fraternity.

DODDS, - Frederick "Earl": August 11, 1982. Born in 1895, Dr. Dodds graduated from the University of Toronto in 1923. He practised in Lanark, Ontario, and Westlock and Red Deer, Alberta. Dr. Dodds was a past-president of the Central Alberta Dental Society.

MACDONALD, Gordon Erwin: August 5, 1982. Dr. Macdonald born on May 25, 1921 and graduated from McGill University in 1950. He practised at the Shaughnessy Hospital in Vancouver, B.C. He served in the RCAF from 1942-45 and flew about 35 combat missions.

MONCARZ, Szaer: July 9, 1982. Dr. Moncarz, born on October 6, 1946, graduated from the University of Toronto in 1972. He practised in Toronto, Ontario.

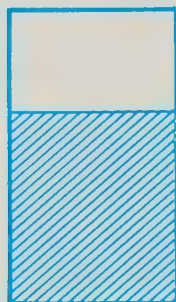
PLAMONDON, Viger: Le Dr Plamondon est décédé le 14 août, à l'âge de 86 ans. Il était né le 19 septembre 1895. Docteur en chirurgie dentaire de l'université de Montréal en 1925, et Maître en Science dentaire (chirurgie buccale et radiologie) à la Northwestern University de Chicago, en 1927. Il fut même, avec ses confrères, à l'origine de

la fondation de l'École dentaire de l'Université Laval dans les années 1960. Il était membre actif du Collège des Chirurgiens-Dentistes de la Province de Québec, dont il fut président, membre correspondant de la Société Odontologique de France (1937-60), et aussi, membre actif de l'Association des Chirurgiens-Dentistes de l'Amérique du Nord.

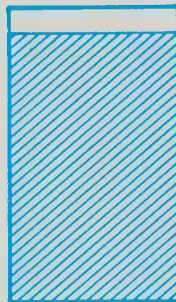
SCHMIDT, Edith: August 10, 1982. Mrs. Schmidt, who received a CDA Distinguished Service Award at the 1981 CDA Convention in Calgary, had retired late last year after nearly 20 years with CDSPI. As general manager of the dental insurance firm since 1975, Mrs. Schmidt had been involved in a wide range of challenges and changes during the past few years of her career. She began working at CDSPI as an accountant in 1962.

Here's why disability insurance is incomplete without cost-of-living protection

The buying power of a \$2,000 monthly disability benefit shrinks to \$1,312 in just 5 years, with 10% annual inflation.



But if you've bought the Cost-of-Living Option in the Canadian Dentists' Insurance Program's disability plan, you'll still have \$1,826 worth of buying power 5 years later.



Be prepared for a serious drop in your standard of living if you suffer a lengthy disability and don't have cost-of-living protection built into your coverage. As the charts show, at 10% annual inflation you'll have only 65% of your original buying power after five years of disability.

And here's why your profession's own plan should be your first choice for disability coverage with cost-of-living protection.

There are important differences between the Cost-of-Living Option in the Canadian Dentists' Insurance Program's disability plan and the protection offered by most insurance companies.

- 1.** The Dentists' plan increases your benefit each year by 10% of your original amount, regardless of the actual inflation rate. Most private plans limit the annual increase to only 8%.
- 2.** The extra premium for the 10% Cost-of-Living Option in the Dentists' Plan is less than the cost of the 8% indexing offered by most insurance plans.
- 3.** If you're able to work again at a reduced income, the Cost-of-Living Option in the Dentists' Plan will apply to your residual benefits.

Nearly 30% of all participants in the Canadian Dentists' Insurance Program's disability insurance have enrolled for the Cost-of-Living Option. We urge you to consider it.



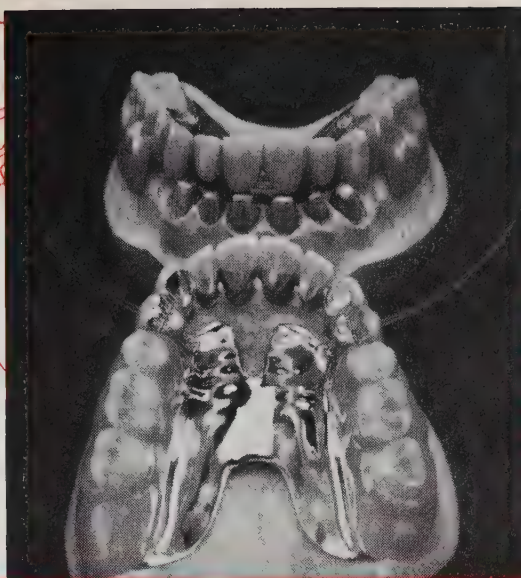
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Dr. Dennis Smith honored in Japanese ceremony

Dr. Dennis C. Smith of the University of Toronto Faculty of Dentistry received the second Mitch Nakayama Memorial Award from the Pierre Fauchard Academy, Japanese Section in Sapporo, Japan, on July 17.

Awarded in recognition of a "distinguished contribution of international significance to the elevation of dentistry through improvements in the field of the science of dental materials," the honor, which included a framed certificate and medal, was presented by Dr. Masahiro Tsutsui, chairman of the PFA Japanese Section.

Dr. Smith, who is a professor of biomaterials at the University of Toronto, delivered his acceptance lecture, "Milestones in Dentistry," in which he dealt particularly with adhesive dental restorative materials.

Dr. and Mrs. Smith received much respect, courtesy and Japanese hospitality as guests of the Japanese Section. Dr. Smith was asked to give lectures by many Japanese academic groups. He did give lectures to the faculty and faculty-student gatherings at Hokkaido University Dental



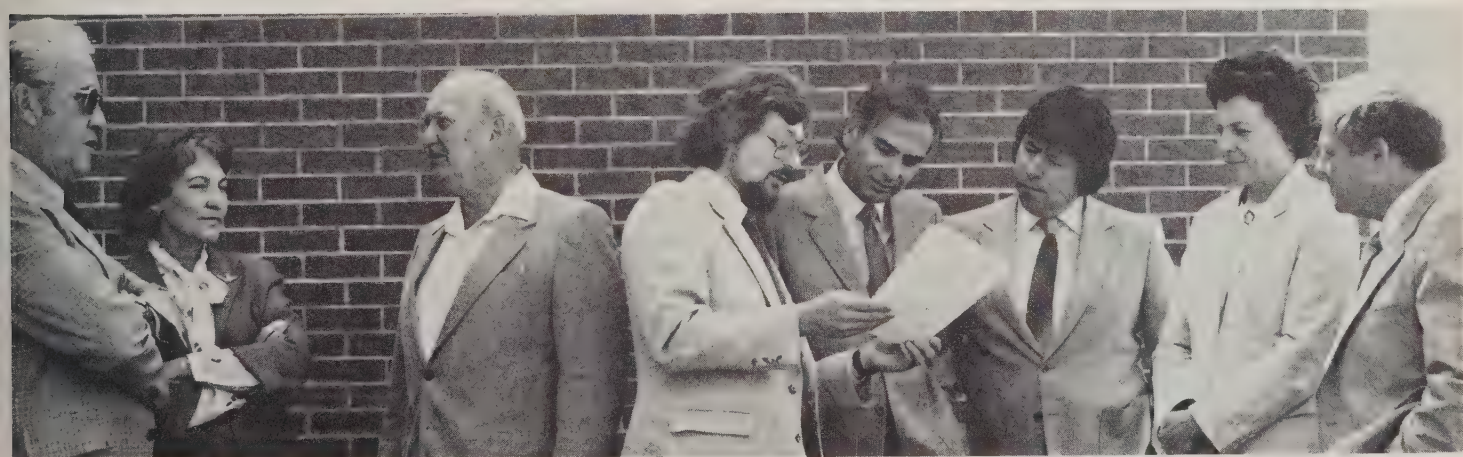
Dr. Dennis C. Smith, left, receives the Mitch Nakayama Memorial Award certificate from Dr. Masahiro Tsutsui, chairman of the PFA Japanese Section.

School, the Aichi-Gakuin University School of Dentistry and the Nihon University School of Dentistry.

He was also escorted on tours of the Osaka University Dental School, Osaka Dental College, Kyoto University Medical School Biomaterial Research Division.

The Mitch Nakayama Memorial Award was created by the board and officers of the PFA, Japanese Section in 1980 as a tribute to the late Mitch Nakayama, a lawyer in the dental trade, who did much to aid funding of dental education and made a great contribution toward elevating standards of the dental profession.

Council on Hospital Services meets at CDA headquarters



During their final meeting of the 1981-82 term of office, members of the CDA Council on Hospital Services posed for the CDA camera. They are, left to right: Dr. D.L. Thompson, Calgary; Mrs. Thora Appelt, secretary; Dr. Kenneth Gordon, Edmonton; Dr. J.H. Gryfe, Weston, Ont.; Dr. M. Mervin Gornitsky, chairman, Montréal; Dr. Edward Cree, Montréal; Dr. G.L. Terriss, Halifax; and Dr. W.H. Sussel, Chilliwack, B.C.

Some provinces altering statutes of limitations

Some provincial legislatures in Canada have begun to revise their statutes of limitations, which establish the time limit during which a person can bring action on a charge of malpractice or negligence against dentists, medical practitioners, or other health professionals.

In the majority of the provinces, these statutes have remained unchanged since they were first enacted: In Newfoundland, New Brunswick, Manitoba, Quebec and Prince Edward Island, the statutes have not been altered, although there have been rumblings in both Newfoundland and New Brunswick. But two provinces — Nova Scotia and British Columbia — have recently indicated they would extend the time limit to make the statutes more "open-ended."

Efforts to do so by the Nova Scotia legislature have recently been successfully opposed through extensive lobbying by health groups in that province.

In June, Nova Scotia's Attorney-General's office proposed to extend the then existing one-year time limit to somewhat indefinite period. Medical and legal circles claimed that lengthy extension would result in "stale claims."

The Nova Scotia Dental Association, the Medical Society of Nova Scotia, the Nova Scotia Association of Health Organizations and the Nova Scotia Barristers Society all went before the law amendments committee of the legislature, to argue for a reduction of the proposed extension.

As a result, the Government agreed to reduce the period to a two-year limit with a further clause restricting all judicial extensions to four years after the initial limitation period. The original Bill provided for an unlimited judicial discretion to extend all limitation periods.

"The six-year limit was looked upon as something considerably better than what was originally proposed," said Mr. D.V. Pamenter, Executive Director of the Nova Scotia Dental Association.

'Not particularly satisfied'

"But we're still not particularly satisfied with it. That's a long time and it is very tough for a dentist to remember a case that occurred six years before," he said.

Dr. S.G. Bagnall, Registrar of the Provincial Dental Board of Nova Scotia, which is the licencing body for the Association, agreed with Pamenter. "The limit is much more palatable now. We can live with it, but we certainly couldn't live with it before."

Why the sudden decision to amend the statutes?

Pamenter said the Association is "not sure of the rationale behind the government's decision. They shouldn't make changes for change sake."

The dental association in British Columbia has also been trying, unsuccessfully, to get that province's Act changed. The current Act establishes a two-year limit as the period during which a person must file a charge, from the time he first became aware of the alleged negligence or malpractice. The absolute limit is 30 years.

Mr. Ken Croft, Managing Director of the College of Dental Surgeons of B.C., said this clause is too open-ended because a patient might not become "aware" of this problem for several years after treatment occurred. The only two groups not bound by this general limitation, he said, are medical practitioners and hospitals. Their absolute limit was reduced in 1977 to six years.

Other dental associations polled by

the CDA Journal agree with Croft that an almost unlimited time frame is unfair for the dentist or doctor.

Dr. G.H. Peacock, Secretary-Treasurer and Registrar of the College of Dental Surgeons of Saskatchewan, said there was some discussion by the Saskatchewan government to extend the Statute beyond its current one-year limit. "We (the College) made it very clear we didn't want it extended beyond one and one-half to two years. We feel a conscientious patient is aware of his problem within the 12 months after treatment. The one-year limit eliminates some of the frivolous cases."

Alberta still maintains a one-year limitation period. Dr. B.P. Martinello, the Alberta Dental Association's Executive Director and Registrar said that several years ago, the Alberta government wanted to extend it to 10 years, "but we haven't heard anything since." Dr. Martinello said it would create a lot of problems and would be vigorously opposed.

Ontario change in 1974

In Ontario, the six-month limitation period outlined in the Health Disciplines Act was extended to one year in 1974. At that time, the government wanted to extend it to six years, but pressure from groups such as the Ontario Dental Association stopped that, according to Mr. John Gillies, ODA's Executive Director.

Mr. Kingsley Butler, General Manager for the Canadian Dental Services Plans Inc., believes a one-year limit is sufficient to launch a charge of malpractice or negligence. In his experience, the majority of suits are "launched within 10 weeks of treatment."

"My feeling is if a patient is angry at a dentist, he's going to launch a suit right away and not leave it for several years," he said.

Briefly —

Prior to the recent election call the New Brunswick Legislature had proposed to set up a new "umbrella" health disciplines act, to be administered by a one-man commission.

Health service groups directly affected felt betrayed.

"We don't buy that at all," said Dr. J.G. Thompson, Registrar of the New Brunswick Dental Society. That one man "could be any hack. The man they seem to have in mind would probably be acceptable. But after him... who knows?"

"This is not what we recommended," he continued, referring to the consensus of opinion among the 17 New Brunswick health groups, including dental technicians, dentists, physicians, denturists, social workers, dieticians, registered nurses and assistants, occupational therapists, optometrists and radiological technicians.

"We had hoped," he said, that Bill 44, which has now had two readings in the Legislature, would have set up "at least a panel of senior health services representatives" as a commission.

The bill, which the government had intended to be "model act" would replace the various private statutes enacted many years ago to regulate the health professions.

If the Hatfield government is returned on October 12, Bill 44 will be revived. "It has to come back to the House anyway," Dr. Thompson said.

♦♦♦♦♦♦♦♦

Dr. Catalena Birek, MD (Dent), PhD, a researcher with the Medical Research Council group in the field of periodontal physiology, working in the Faculty of Dentistry, University of Toronto, was the recipient of the Canadian Dental Research Foundation Award for 1981.

The presentation was made on Sept. 24, during the annual meeting of the CDA Board of Governors, by the re-

tiring CDA President, Dr. Donald E. Williams.

Dr. Williams also presented the Institutional Award to Dr. Jane Aubin, for Dr. A.R. Ten Cate, Dean of the Faculty of Dentistry, University of Toronto, on the same occasion.



Dr. Catalena Birek

Dr. Birek won the award for her research paper entitled "Dome Formation by Oral Epithelia in Vitro."

She received the engraved CDRF plaque and a cheque in the amount of \$1,000.

♦♦♦♦♦♦♦♦

A British Columbia Dental Technicians Board, to administer the Act governing both dental technicians and mechanics in that province, has been created by a provincial cabinet order-in-council.

There will not be a dentist among the five members, in spite of request to that effect from the College of Dental Surgeons of B.C.

B.C. Health Minister James Nielsen confirmed in a letter to the College that he did not intend to appoint a dentist to the new board.

Dr. Ronald Markey, President of the College, told the CDA Journal the College intends to "ask the minister why he will not appoint a dentist."

♦♦♦♦♦♦♦♦

Dr. Maureen M. Law, Assistant Deputy Minister, Health and Welfare Canada, has been elected chairman of the Executive Board of the World Health Organization. She was installed in the office at a recent meeting of the Board in Geneva, Switzerland. She is the first woman to be elected to this position.

Dr. Law, a native of Calgary, was graduated from Queen's University School of Medicine in 1964. She became a member of the Executive Board of the WHO in May, 1980. As chairman, she succeeds Dr. John Hiddlestone, Director-General, New Zealand.

She joined the Health and Welfare department in 1974 as Director, Community Health Services Development. In July, 1978, she was appointed Assistant Deputy Minister of the newly-created Health Services and Promotion Branch. The Branch is concerned with federal responsibilities for the promotion of the health and well-being of Canadians and the prevention of illness and disability, also, health insurance, health services research and consultation.



Dr. Maureen Law

(Continued on next page)

About 300 delegates from 22 countries attended the Sixth Congress of the International Association of Dentistry for the Handicapped, held in Toronto, July 20-25.

Delegates discussed and identified problems existing in the field of dental care for the handicapped at the gathering, which was described by Dr. Norman Levine, Professor of the University of Toronto's Department of Paedodontics and chairman of the Congress, as "an overwhelming success."

"Humane Help for the Handicapped" was the subject of the keynote address, delivered by Professor Abbyann Lynch of Toronto. Dr. Alexander Lowden, also of Toronto, discussed the subject "Lysosomal Storage Diseases — More Common than We Thought."

A second keynote address, "Rehabilitation Engineering Service Research and Development," was delivered by Dr. Morris Milner, of Toronto.

In addition to the scientific program, video and film presentations, poster sessions and table clinics were held.

The next Biennial Congress of the Association is scheduled for 1984 and will be held in Amsterdam, Holland.

Dentists participating in the clinical workshop sponsored by the Bytown Dental Study Club in Ottawa Sept. 23-25 were not only taught how to conduct continuing education courses themselves, but also to get fully acquainted with MEDLINE, CDA Library's computerized information retrieval system.

About 20 dentists attended the three-day session, launched by workshop leader Dr. Robert H. Rasmussen, EdD, Associate Professor of Dentistry, Louisiana State University School of Dentistry, and Assistant to the Chancellor, L.S.U. Medical Center.



Dr. Robert H. Rasmussen

Objectives of the course were: to examine the basic elements of learning and teaching; provide an opportunity to practise learning and teaching skills; analyse some aspects of research projects, and apply what is learned to your professional life.

"It was of value to every dentist and also helpful in teaching office personnel," said Dr. John F. Miner, president of the Bytown Dental Study Club.

Participants were asked, before the workshop began, to select a short, well-defined topic and review the literature on that topic through MEDLINE. They then used the material to give "an organized presentation" on the subject, which was evaluated by the instructor and fellow-participants as a teaching exercise.

The incidence of tooth decay in children aged five to 17 in the United States has been cut almost in half in the past decade, according to findings from a recent National Institute of Dental Research survey of 38,000 school children in that country, reported by ADA News.

Accordingly, there has been a significant drop in the income of some dentists.

Dr. John Stamm of the Department of Community Dentistry, McGill University, Montréal, believes

the situation "is somewhat comparable in most parts of Canada."

A recent British Columbia survey, conducted by the health ministry of that province, indicated dental decay has declined by close to 50 per cent. But it wasn't a 50 per cent decrease in all age groups, Dr. Stamm said.

Fluoridated community water supplies, along with the fluorides in over-the-counter dental care products, is credited for this decline in tooth decay.

The result is that part of dentists' incomes derived from repair of tooth decay damage has also declined.

However, Dr. Stamm believes "the income of the average dental practitioner has kept pace with the times. He's made some adjustments in the types of treatment he is doing by taking on more interceptive and preventive periodontal work.

"In the long term, dental practitioners will have to make some adjustments, and I think they're doing so already."

The Canadian Nurses Association publicly endorsed the fluoridation of community water supplies at their annual meeting and convention in June.

The Association resolved to support water fluoridation because "tooth decay, which affects a majority of Canadians, is one of the major health problems."

Other health organizations that support water fluoridation include the Department of National Health and Welfare, Canadian Medical Medical Association, the Canadian Public Health Association and the World Health Organization.

A nine-foot high molar greets visitors to the Health Pavilion at the 1982 World's Fair in Knoxville, Tennessee.

The first exhibit of its kind at a world fair, the giant molar comes complete with two lingual roots and a crown. It is connected to an audio program in which participants can

learn over earphones about proper oral hygiene.

Exhibits placed around the molar depict the story of fluoridation, what a dentist looks for during an examination, a modern dental operatory equipped with a new panoramic x-ray unit and the anatomy of a tooth's interior.

The Health Pavilion was developed by a team of dentists, physicians and other health professionals to make the public aware of the importance of regular preventive health care. The dental exhibit has been especially successful in educating visitors about dental health while enhancing the positive image of dentists, reports Dr. Frank Bowyer, past-president of the American Dental Association and chairman of the Health Pavilion Board of Directors.



Two New Brunswick dentists were called upon to treat an unusual dental emergency recently. Sahib, a 12-year-old, 7,000-pound Asian elephant with the Martin and Downs Tent Circus, was suffering from a jumbo toothache. The cause — an enormous cavity in the end of a broken tusk.

Sahib had consistently been plagued with the problem and veterinarians just as consistently treated the infection by flushing the area with antibiotics and disinfectants, and administering antibiotics by injection. This time, the veterinarian who was called in on the case saw it as a dental problem and contacted the local Hampton dentist, William Rector.

Aided by his partner, Dr. Ralph Richards, Dr. Rector arrived on the scene armed with a very large bottle of zinc oxide and eugenol paste for the filling, as well as improvised tools packed in a box labelled 'Elephant Kit'.

The filling is temporary. The two dentists will be looking in on Sahib soon to pick out the filling and ensure the infection has indeed been eliminated. They will then seal the cavity again with a permanent filling.

Motrin®

(ibuprofen) tablets

Product Information

Action: Ibuprofen has demonstrated anti-inflammatory, analgesic and antipyretic activity in animal studies designed to specifically demonstrate these effects. Ibuprofen has no demonstrable glucocorticoid effect.

Following a single 200 mg dose of ibuprofen in humans, useful blood levels were demonstrable in 45 minutes and still present in six hours but at barely detectable levels. Peak levels occurred at approximately one hour after ingestion. Levels were lower when taken in conjunction with food.

Ibuprofen is rapidly metabolized and eliminated in the urine. The excretion of ibuprofen is virtually complete 24 hours after the last dose. The serum half-life of ibuprofen is 1.8 to 2 hours. There is no evidence of drug accumulation or enzyme induction.

Ibuprofen has been found to be less likely to cause gastro-intestinal bleeding in doses usually used than is acetylsalicylic acid.

Clinical trials in man have shown activity of a dose of 1200-1800 mg of ibuprofen daily to be similar to that of 3.6 grams of acetylsalicylic acid daily.

Indications and Clinical Uses: Motrin (ibuprofen) is indicated for the treatment of rheumatoid arthritis and osteoarthritis. Motrin is also indicated for the relief of mild to moderate pain accompanied by inflammation in conditions such as musculo-skeletal trauma and post-dental extraction. Motrin is also indicated for the relief of pain associated with dysmenorrhea.

Contraindications: Motrin (ibuprofen) should not be used in patients who have previously exhibited hypersensitivity to it, or in individuals with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to acetylsalicylic acid or other nonsteroidal anti-inflammatory agents. (see WARNINGS)

Motrin should not be used during pregnancy, in nursing mothers or in pediatric patients because its safety under these conditions has not been established.

Warnings: Anaphylactoid reactions have occurred in patients with known A.S.A. hypersensitivity (see CONTRAINDICATIONS)

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported in patients receiving Motrin (ibuprofen). Peptic ulceration, perforation, or severe gastrointestinal bleeding can have a fatal outcome, and although few such reports have been received with Motrin, a cause and effect relationship has not been established. Motrin should be given under close supervision to patients with a history of upper gastro-intestinal tract disease.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in colour vision have been reported. If a patient develops such complaints while receiving Motrin (ibuprofen), the drug should be discontinued and the patient should have an ophthalmologic examination. Fluid retention and edema have been reported in association with Motrin; therefore, the drug should be used with caution in patients with a history of cardiac decompensation or renal disease.

Motrin, like other nonsteroidal anti-inflammatory agents, can inhibit platelet aggregation but the effect is quantitatively less and of shorter duration than that seen with acetylsalicylic acid. Motrin has been shown to prolong bleeding time (but within the normal range) in normal subjects. Because this prolonged bleeding effect may be exaggerated in patients with underlying hemostatic defects, Motrin should be used with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients on Motrin should be cautioned to report to their physicians signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

When Motrin is added to the treatment program of patients who have been on prolonged corticosteroid therapy, and it is decided to discontinue this therapy, the corticosteroid should be tapered slowly to avoid exacerbation of disease or adrenal insufficiency.

Aseptic meningitis has been reported in connection with Motrin therapy in patients with systemic lupus erythematosus. Such patients may also develop hypersensitivity reactions to Motrin such as fever, rash or abnormal liver function more often than those with other disorders. Caution should therefore be exercised when considering Motrin therapy for patients with systemic lupus erythematosus.

Drug Interactions

Coumarin-type anticoagulants: Several short-term controlled studies failed to show that Motrin significantly affected prothrombin times or a variety of other clotting factors when administered to individuals on coumarin-type anticoagulants. However, because bleeding has been reported when Motrin and other nonsteroidal anti-inflammatory agents have been administered to patients on coumarin-type anticoagulants, the physician should be cautious when administering Motrin to patients on anticoagulants.

A.S.A.: Animal studies show that A.S.A. given with nonsteroidal anti-inflammatory agents including Motrin yields a net decrease in anti-inflammatory activity with lowered blood levels of the non-A.S.A. drug. Single dose bioavailability studies in normal volunteers have failed to show an effect of A.S.A. on Motrin blood levels. Correlative clinical studies have not been done.

Adverse Reactions: The following adverse reactions have been noted in patients treated with Motrin (ibuprofen):

Note: Reactions listed below under Causal Relationship Unknown are those which occurred under circumstances where a causal relationship could not be established. However, in these rarely reported events, the possibility of a relationship to Motrin cannot be excluded.

Gastrointestinal: The adverse reactions most frequently seen with Motrin therapy involve the gastrointestinal system.

Incidence 3 to 9%: nausea, epigastric pain, heartburn

Incidence 1 to 3%: diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the gastrointestinal tract (bloating or flatulence)

Incidence less than 1%: gastric or duodenal ulcer with bleeding and/or perforation, gastrointestinal hemorrhage, melena, hepatitis, jaundice, abnormal liver function (SGOT, serum bilirubin and alkaline phosphatase)

Central Nervous System:

Incidence 3 to 9%: dizziness

Incidence 1 to 3%: headache, nervousness

Incidence less than 1%: depression, insomnia

Causal relationship unknown: paresthesias, hallucinations, dream abnormalities

Dermatologic:

Incidence 3 to 9%: rash (including maculopapular type)

Incidence 1 to 3%: pruritus

Incidence less than 1%: vesiculobullous eruptions, urticaria, erythema multiforme

Causal relationship unknown: alopecia, Stevens-Johnson syndrome

Special Senses:

Incidence 1 to 3%: tinnitus

Incidence less than 1%: amblyopia (blurred and/or diminished vision, scotomata and/or changes in colour vision). Any patient with eye complaints during Motrin therapy should have an ophthalmological examination (see PRECAUTIONS)

Causal relationship unknown: conjunctivitis, diplopia, optic neuritis

Metabolic:

Incidence 1 to 3%: decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS)

Hematologic:

Incidence less than 1%: leukopenia and decreases in hemoglobin and hematocrit

Causal relationship unknown: hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes (e.g. purpura, epistaxis, hematuria, menorrhagia)

Cardiovascular:

Incidence less than 1%: congestive heart failure in patients with marginal cardiac function, elevated blood pressure

Causal relationship unknown: arrhythmias (sinus tachycardia, sinus bradycardia, palpitations)

Allergic:

Incidence less than 1%: anaphylaxis (see CONTRAINDICATIONS)

Causal relationship unknown: fever, serum sickness, lupus erythematosus syndrome

Endocrine:

Causal relationship unknown: gynecomastia, hypoglycemic reaction

Renal:

Causal relationship unknown: decreased creatinine clearance, polyuria, azotemia

Symptoms and Treatment of Overdosage: A nineteen month old child weighing 12 kg ingested from 2800 to 4000 mg of Motrin (ibuprofen) and presented with apnea, cyanosis and responded only to painful stimuli. Oxygen and parenteral fluids were given and at 12 hours she appeared completely recovered. Two other children (10 kg each) ingested 1200 mg of Motrin each and there were no signs of acute intoxication or late sequelae. A 19 year old male who had ingested 8000 mg of Motrin reported dizziness, and nystagmus was noted. He recovered with no reported sequelae after parenteral hydration and three days' bed rest.

In cases of acute overdosage, the stomach should be emptied by vomiting or lavage, though little drug will likely be recovered if more than an hour has elapsed since ingestion. Because the drug is acidic and is excreted in the urine, it is theoretically beneficial to administer alkali and induce diuresis.

Dosage and Administration: Rheumatoid arthritis and osteoarthritis: The initial daily dosage in adults is 1200 mg divided into 3 or 4 equal doses. Depending on the therapeutic response, the dose may be adjusted downward or upward. The daily dosage should not exceed 2400 mg.

Maintenance therapy, once maximum response is obtained, will range from 800 to 1200 mg per day.

Mild to moderate pain accompanied with inflammation, dysmenorrhea: 400 mg repeated as required every 4 to 6 hours. The daily dosage should not exceed 2400 mg.

Children: Due to the lack of clinical experience, ibuprofen is not indicated for use in children under 12 years of age.

Supplied: 200 mg (yellow), 300 mg (white), 400 mg (orange) sugar-coated tablets and 600 mg (peach) film-coated tablets in bottles of 100 and 1000.

Product monograph available on request. CE 1542 1C

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M

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ABSTRACT

Changes in dental service supply-demand ratios and increased competition for the available patient pool make it desirable for dental practitioners to utilize modern marketing techniques. In this paper, some of the factors that adversely affect private dental practice are discussed and the role of marketing in combatting these trends is considered.

Introduction

Dentistry has discovered marketing. The term is appearing frequently in the dental literature and has become a "buzzword." Since marketing and its dental implications are likely to assume increasing importance in the near future, it is desirable to review and examine the science and its application to the delivery of dental health care.

The Nature of Marketing

Marketing is human activity directed at satisfying needs and wants through exchange processes.¹ This definition lends itself well to concepts involved in marketing of professional health services.

In its simplest form, a marketing concept means that an organization or individual seeks to make a profit by satisfying the needs of consumer groups. Effective marketing begins with the identification of consumer needs and then works backward to devise ways and means of satisfying those needs. The end result is an efficient market in which the consumer is satisfied and the provider profits. The key principle to grasp is that the task of marketing is not to manipulate customers to do what suits the interest of the firm, but rather to find effective and efficient means of making the firm do what satisfies the needs of the customers.²

Marketing management is the analysis, planning, implementation, and control of progress designed to bring about desired exchanges with target markets for the purpose of achieving organizational objectives. Marketing management relies heavily on designing an organization that considers the needs and desires of the market, the use of effective pricing and distribution, and the communication with, motivation and servicing of the market.¹ These operating definitions are consistent with the marketing

concept of customer need satisfaction as the key to achieving organizational objectives.

The marketing manager is an individual responsible for developing and implementing the market management process. He is often the product of a post graduate course of study in commerce, finance, or business administration. Many organizations employ a marketing manager to help them achieve organizational objectives.

Marketing of Dental Care

For a variety of reasons, health care services marketing has been slow to evolve. Dentistry and medicine are established senior health professions whose traditional hallmarks are education beyond the usual level, service to the public and the right to self-governance. Self-governance includes the setting of professional educational standards, the control of quality and quantity of professional practitioners by licensing and disciplinary procedures, and the establishment of professional codes of ethics. In effect, the professions have operated independent of higher authority.³ Resultant traditional modes of practice and codes of ethics preclude the use of marketing techniques. The typical practice was a sole proprietorship which operated on a fee-for-service basis and depended on word-of-mouth advertising and testimonials from satisfied patients for the development of new clientele. Because there was a chronic shortage of practicing dentists, patients were conditioned to and accepted long waiting periods before elective dental treatment was performed at a fee determined by a pre-established fee schedule.

The United States Supreme Court has ruled that minimum fee schedules violate anti-trust laws in that they restrict free trade and commerce. Similar interpretations of Canadian anti-combines legislation have compelled provincial dental associations to change what have been seen as mandatory "Fee Schedules" to optional "Suggested Fee Guides." Preambles describing the proper use of suggested guides allude to "usual and customary fees."

Better informed and more knowledgeable dental patients are increasingly aware and critical of the quality and cost of the services they receive. This has resulted in an erosion of consumer loyalty and produced a growing tendency for patients to shop for alternative sources of service.

A recurring theme in the literature is that dental manpower supply is rapidly approaching the point of exceeding dental service demand. This trend has a direct influence on practice profitability and its greatest impact is on recent graduates who have established new dental practices.^{4,5}

Barriers to Marketing

Inherent attitudes and beliefs of dentists preclude an easy adaptation to changes in the professional services delivery status quo. Many professionals are loathe to think of themselves as businessmen and react with hostility to suggestions that they may be motivated by financial reward rather than by the satisfaction of providing service to their clients. Discussion of fees or alternative modes of treatment delivery is often distasteful to them. At the same time, provincial dental legislation imposes explicit restrictions on advertising, patient solicitation, and commissions or fee-splitting generated by any patient referral process. Professional service providers have also made the mistake of equating marketing with selling. As a result, they see that professional Codes of Ethics prohibit the marketing of their services.⁶

In spite of marketing barriers, certain dental practitioners have adopted modern marketing methods which will have a significant impact on the future delivery of dental care services.

Practice Objectives and Situation Analysis

Although many factors have contributed to a decline in dental practice profitability, a major cause is the rapid increase in the number of dentists in active practice. Practicing dentists in the United States are increasing at an annual rate of 24 percent although annual population growth is only 9 percent.⁸ In Canada, a similar trend is evident. In the Canadian situation, the most important contributing factor has been a rapid increase in the number of schools of dentistry and a resultant dramatic increase in the number of graduates. In 1961, five Canadian dental schools graduated a total of 174 dentists;⁹ in 1979, ten dental schools produced 473 dentists.¹⁰ In 1961, there were 5,865 licensed dentists in Canada; by 1979 the number had increased to 10,763. Dentist to population ratios during this interval changed from 1:3,047 (1961) to 1:2,212 (1979). The increased number of recent graduates has lowered the average age of practicing dentists. This trend indicates that, in the future, Canada will experience a lowered rate of dentist attrition due to death and retirement than it has in the past.¹¹ On the other hand, con-

tinued inflation, reported to be close to 12 per cent per annum for the past several years, is delaying the retirement of older practitioners. The combination of more new dentists and delayed retirement of older dentists will contribute to a continued increase in the numbers of active practitioners in the country.

Technological advances, dental auxiliary utilization and practice organization improvements have resulted in a remarkable increase in practice productivity. Increased productivity of existing practices can have a significant effect on manpower need.

While increased use of chairside assistants has improved productivity, a proliferation in types and numbers of dental para-professionals has produced increased competition in the marketplace. Between 1961 and 1979, the number of Canadian registered dental hygienists grew from 74 to 3,506; 73 percent of this increase occurred since 1972¹⁰ and was a result of the responsibility for dental hygiene training being shifted from schools of dentistry to rapidly increasing community colleges. Dental hygienists, although not yet in direct independent competition, deliver services that once were provided exclusively by dentists. In eight provinces and one territory, removable denture services can be provided directly to the public by denturists.¹² Denturists do compete directly with dentists for the available patient pool.

Many publicly funded children's dental care plans are operating in Canada. Those in Toronto, North York, Calgary, and Vancouver employ dentists to provide services while the Prince Edward Island plan uses dentists and expanded duty dental hygienists. In the Saskatchewan Dental Plan, dental therapists are the main providers of service. Dental therapists are trained and employed by the provincial government and provide basic dental care for children in school based clinics. The Saskatchewan Dental Plan has virtually eliminated similar service in the private sector; as of August 31, 1981, 83.5 per cent of children utilized the service.¹³

Additional competition for the Saskatchewan patient pool emerged in 1981 when the Adolescent Dental Plan was introduced. It is an extension of the children's plan and provides care for adolescents. The patient pool is split between school clinics, operated by dental therapists, and private practices. The adolescent plan provides services for secondary school students who are between 14 and 18 years of age. Patients seen by private dentists have treatment paid for on a capitation basis by government funds which are administered by the College of Dental Surgeons

(Continued on next page)

of Saskatchewan. In Regina and Saskatoon, only 30 per cent of eligible patients are allocated to the private sector.

In the past twenty years, epidemiologic studies suggest a steady decline in the prevalence of dental caries with a concomitant reduction in need for treatment. This trend has been identified in all parts of North America including the larger cities of Canada.^{13,14} Probable causes for the phenomenon are fluoridation of water supplies, wide spread use of fluoride dentifrices, and a heightened awareness and utilization of preventive measures.

Ongoing inflation influences disposal of discretionary income and can affect dental practice profitability. Since much dental treatment is elective in nature, the profession will have to actively compete with various non-essential products and services for the available dollars.

Untapped Opportunities

A marketing analysis should seek untapped opportunities in existing markets. Current market analyses suggest that several market segments are underserved at this time. For example, almost 50 per cent of the population of Canada does not visit a dentist in any given twelve month period.¹⁵ Many potential patients are unable or unwilling to visit a dentist during customary office hours.^{8,16} Dentists who establish non-traditional offices in retail locations are attempting to capture this underserved population by offering convenience of location, extended operating hours and competitive pricing.¹⁷

Non-traditional dental offices provide examples of modern marketing. These offices are designed to attract patients currently not using traditional delivery systems and those who want convenient service. Offices in department stores and shopping malls allow for increased visibility and convenience without violating professional codes of ethics. Features such as free parking, baby sitting, and patient paging systems also make these offices attractive to potential patients. Extended hours of operation, with dentists working in shifts, allow for efficient utilization of expensive facilities; fewer treatment rooms and less office space are needed.

In some offices, a wide product range is offered. Dental specialists are available and patients are not referred out of the practice. Continuity of service within a facility may increase customer loyalty. Offices may also provide same-day prosthetic service. Patients are prepared for prostheses which are fabricated and delivered on the same day. A dental laboratory on the premises provides technical services at minimal cost.¹⁸

Future analysis of non-traditional dental operations will indicate if this innovative approach of dental care delivery is viable.

SUMMARY

Marketing management as it applies to the delivery of dental professional care has been discussed.

If the dental application of marketing strategy proves

successful, then those dentists providing care within the traditional framework may be forced to reassess their practices and consider more aggressive marketing of their services.

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Dental electrosurgery: general precautions

Fekri S. Osman, P. Eng.
Ottawa, Ontario

Electrosurgery can be defined as the intentional passage of high-frequency electrical current through tissues of the body to achieve a controllable surgical effect. It is a means of producing localized heating in the tissues. By varying the methods of application, the heat can be concentrated in a controlled manner and can be used either for cutting tissue or coagulation of blood vessels.

Any electrosurgical unit consists of:

1. A generator of high-frequency electrical power;
2. Electronic circuitry and devices to permit control of the duration, mode of operation, and intensity of the application;
3. Cables and electrodes for delivering high-frequency current to the patient.

Dental electrosurgery has proved practical in dealing with the space problem in the mouth. The wide variety of designs of the wire electrodes permits easy access to all parts of the mouth. They allow the dental surgeon to incise or remove soft tissues simply and quickly. Also, the surgeon works in a dry field as the blood vessels become sealed by coagulation. This saves valuable time during surgery and minimizes the possibilities of contamination.

Some examples of daily uses of dental electrosurgery include; tissue removal; root canal sterilization, hemostasis, bleaching of teeth, and periodontal surgery.

Many hazards are associated with electrosurgery, including accidental burns to the patient or attending personnel, electrocution, electrical shock, improper function of equipment, and electrical interference with other medical devices such as pacemakers or patient monitoring equipment.

In dental electrosurgery, there is an additional hazard, namely the depth of heat penetration into adjacent tissues. This must be taken into consideration due to oral anatomic limitations created by the very thin gingival tissues covering the periosteum which is attached to bone that usually contains vital teeth. Heat penetration to a depth greater than a few layers of tissue cells becomes potentially destructive and should be avoided.

Awareness of electrosurgical complications is very important. The following are some precautions which can be useful in reducing hazards and improving safety for both patients and attending personnel.

1. Do not increase power output settings if the desired surgical effect is not achieved at the usual settings. Instead, try to find the reason for the apparent malfunction, or replace the instrument. Use of excessive power may prolong wound healing or increase the probability of infection because of excess charred and devitalized tissue at the operating site.
2. Avoid the use of electrosurgical units on patients bearing implanted cardiac pacemakers. If electrosurgery is essential, it is recommended that an external pacemaker be ready and staff skilled in their use immediately available.
3. Remove all metal objects (e.g. jewelry) from the patient before electrosurgery. Such metal objects may serve to concentrate radio-frequency currents and cause burns.
4. Check all cables and plugs prior to each procedure to see if there are any breaks or cracks. Replace them if necessary.
5. Do not sterilize or reuse disposable electrosurgical accessories.
6. Do not attempt to use dental electrosurgery with flammable anesthetics.
7. Beware of possible malfunction if an ESU is dropped or banged into a wall or door. Units accidentally subjected to such shocks should be tested by a qualified technician.

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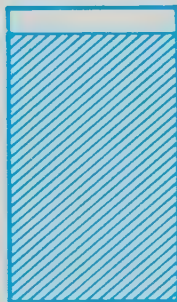
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N-CDAJ

N-CDAJ

Voici pourquoi votre assurance invalidité est incomplète sans l'indexation sur le coût de la vie.

Le pouvoir d'achat d'une indemnité mensuelle de \$ 2 000 ne représente plus que \$ 1 312 après seulement 5 ans, avec 10 % d'inflation par an.



Mais si vous avez choisi l'indexation sur le coût de la vie qu'offre l'assurance invalidité du régime d'assurance des dentistes du Canada, vous aurez encore un pouvoir d'achat de \$ 1 826 par mois après 5 ans.

Attendez-vous à subir une diminution sensible de votre niveau de vie si vous êtes atteint d'une invalidité prolongée et que votre garantie ne comporte pas l'indexation sur le coût de la vie. Comme l'indiquent les illustrations ci-dessus, avec une inflation annuelle de 10 % il ne vous restera que 65 % de votre pouvoir d'achat original après 5 ans d'invalidité.

Voici pourquoi le régime de votre profession constitue la meilleure solution pour une assurance invalidité avec une indexation sur le coût de la vie.

Il existe des différences marquées entre l'indexation sur le coût de la vie de l'assurance invalidité du régime d'assurance des dentistes du Canada et celles offertes par la plupart des compagnies d'assurance.

- 1.** Le régime des dentistes augmente tous les ans votre indemnité de 10 % du montant original, quel que soit le taux d'inflation. La plupart des régimes privés limitent cette augmentation à seulement 8 % par an.
- 2.** La surprime exigée pour l'indexation de 10 % du régime des dentistes est inférieure à celle exigée pour l'indexation de 8 % offerte par la plupart des assureurs.
- 3.** Si vous pouvez recommencer à travailler mais avec un revenu moindre, l'indexation sur le coût de la vie du régime des dentistes s'appliquera à l'indemnité d'invalidité partielle.

Presque 30 % des participants aux assurances invalidité du régime d'assurance des dentistes du Canada ont choisi l'indexation sur le coût de la vie. Nous vous invitons vivement à y penser.

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Le FCED — une dette à acquitter et un pari sur l'avenir — FCED

C'est un privilège de faire partie de la profession dentaire. Aussi, nous qui en sommes membres, devons-nous nous considérer comme obligés envers les gens et les institutions qui ont contribué à notre formation. En appuyant le Fonds canadien pour l'enseignement dentaire (FCED), nous pouvons acquitter partiellement cette dette, reconnaître les avantages que nous avons reçus de l'enseignement dentaire dans le passé et faire un placement pour l'avenir, tout en prouvant que nous nous soucions de la qualité de l'enseignement donné présentement à nos actuels et futurs confrères.

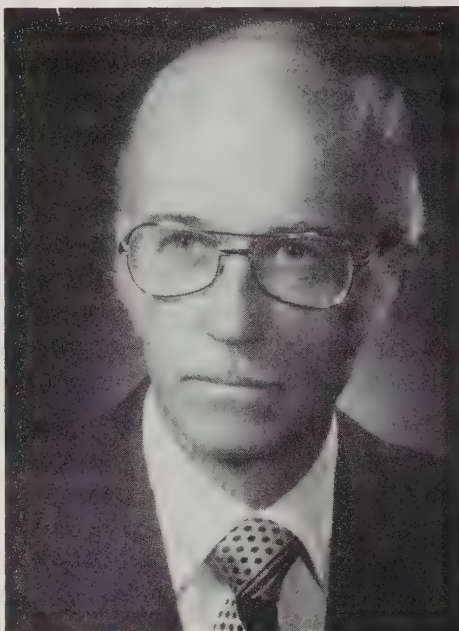
Depuis son institution en 1963, le FCED s'est tellement accru qu'il a été possible d'investir plus d'un million et demi de dollars pour promouvoir des soins de santé dentaire de la meilleure qualité. Les placements effectués dans certains programmes scientifiques ont déjà porté fruit et le continueront à l'avenir.

Le FCED subventionne des recherches dentaires, des conférences étudiantes et des études ayant pour objet la formation de professeurs, ainsi que divers autres projets qui, de près ou de loin, intéressent toutes les écoles dentaires, les étudiants, les dentistes exerçants et les patients dentaires du Canada.

Depuis bientôt 20 ans qu'il existe, le FCED consacre pour chaque dollar reçu 72 sous à la recherche et à l'enseignement dentaires de même qu'à des fonds de dotation et à des réserves. Des 28 sous restants, 13 servent à la cueillette de fonds et 15 couvrent l'administration générale et les services offerts par divers programmes.

Bourses

L'une des principales priorités du FCED est de fournir des bourses d'études et, depuis 1981, il a alloué 52 142\$ en bourses pour la formation de professeurs.



Le Dr James A. Guest

En outre, le FCED contribue financièrement à l'éducation dentaire en accordant d'autres bourses et subventions. L'an dernier, il a offert 15 000\$ aux écoles dentaires du pays, 14 310\$ pour les cliniques étudiantes en table ronde et la Conférence des étudiants dentaires canadiens, 9 625\$ au prix Lorne E. MacLachlan pour la formation de professeurs, 6 000\$ pour la conférence sur l'enseignement dentaire et 4 500\$ en bourses à des étudiants dentaires. De plus, il a alloué 3 827\$ pour l'achèvement du projet de recherche établi à l'Université de Toronto et parrainé par le *Hospital for Sick Children Foundation*, et il a distribué 6 513\$ en prix divers.

136 000\$ en récompenses

En 1962, le Conseil d'administration du FCED a agréé la distribution de 136 000\$ en récompenses, ce qui constitue une augmentation de 22 pour cent par rapport à 1981. Parmi les projets favorisés, mentionnons la conférence biennale sur la recherche et l'enseignement de même que l'étude sur la validité de l'interview du Test

d'aptitudes aux études dentaires. Selon le Conseil d'administration, ce dernier projet est extrêmement important. Grâce à une interview bien menée, les écoles dentaires pourront s'assurer que seulement les meilleurs candidats y seront admis — des jeunes qui non seulement seront compétents intellectuellement, mais qui seront aussi doués d'un caractère, d'un esprit intègre et de qualités intrinsèques, tous signes auxquels se reconnaît le vrai professionnel.

Le revenu de l'an dernier a atteint un record, s'élevant à 238 978\$, soit 25 774\$ de plus qu'en 1980. Les sources en sont les commerces, les industries, des placements, la profession et des organisations dentaires.

De nombreux dentistes et auxiliaires continuent à rendre hommage à la mémoire d'un parent ou d'un ami décédé en faisant un don au fonds commémoratif du FCED. C'est là un geste délicat qui lie intimement le passé à l'avenir. Le nom des défunts honorés par un don au fonds commémoratif est inscrit dans le livre du souvenir au siège social du FCED et une carte *In Memoriam* est envoyée à sa famille.

Les amis du FCED

Pour les dentistes qui font des contributions de 200\$ ou plus, le FCED a établi une nouvelle catégorie, celle des amis du FCED. L'an dernier, 55 dentistes ont mérité ce titre, 246 ont été inscrits comme membres honoraires alors que plusieurs centaines d'autres ont fait des dons plus modestes.

Il est certes encourageant de noter que le FCED suscite la confiance dans ses efforts pour promouvoir et appuyer la dentisterie au Canada.

À la fin de mon mandat comme président du Conseil d'administration du FCED, j'avoue que je continue à m'inquiéter du fait que seulement un faible pourcentage des dentistes cana-

(Suite à la page suivante)

Le Dr Dennis Smith reçoit une distinction au Japon

Le Dr Dennis C. Smith, de la faculté de médecine dentaire de l'Université de Toronto, a reçu le 17 juillet, la deuxième distinction honorifique en souvenir de M. Mitch Nakayama, décernée par la section japonaise de l'Académie Pierre Fauchard lors d'une cérémonie qui s'est déroulée à Sapporo (Japon).

La section lui a rendu cet honneur en reconnaissance de sa "contribution éminente à l'avancement de la médecine dentaire sur le plan international, notamment en ce qui a trait au développement scientifique des matériaux dentaires." La distinction, qui comprenait un certificat et une médaille, lui a été remise par le Dr Masahiro Tsutsui, président de la section japonaise de l'APF.

Dans la conférence qu'il a prononcée pour l'occasion et qui portait sur les grands faits de la médecine dentaire, le Dr Smith, professeur du département de la biomatière à l'Université de Toronto, a traité notamment du développement des adhésifs servant à la restauration dentaire.

Invités de la section, le Dr et Mme Smith se sont vus comblés par le respect et la courtoisie de l'hospitalité japonaise. Le Dr Smith a aussi été invité à prononcer plusieurs conférences devant divers groupes d'universitaires, membres de la faculté et



Le Dr Dennis C. Smith, à gauche, reçoit le prix Mitch Nakayama des mains du Dr Masahiro Tsutsui, président de la section japonaise de l'APF.

étudiants, aux facultés de médecine dentaire de l'Université d'Hokkaido, de l'Université Aichi-Gakuin et de l'Université Nihon.

Il a également visité la faculté de médecine dentaire d'Osaka, le collège dentaire d'Osaka et la division de recherche en biomatière de la faculté de médecine de l'Université de Kyoto.

La section japonaise de l'APF a créé le prix Mitch Nakayama en 1980, pour honorer la mémoire d'un avocat décédé qui avait oeuvré dans l'industrie dentaire et qui, par son aide au financement de l'enseignement dentaire, avait grandement contribué à l'avancement et au rehaussement de la profession.

Le FCED (suite)

diens accorde un appui financier au FCED. Certes, il est stimulant de constater que la somme totale des dons augmente d'année en année et, avec le Conseil d'administration, je suis reconnaissant envers les donateurs qui se sont montrés généreux. À mon avis, cependant, le FCED mérite l'appui de tous les dentistes canadiens. Le passé a vu s'accomplir de grandes choses, mais si la participation était accrue, l'avenir en verrait de bien plus grandes.

Le FCED continuera toujours à viser des normes plus élevées et à accroître le prestige de la profession tout en cherchant à améliorer la qualité des soins dentaires. Le Conseil d'administration nourrit de grands espoirs pour l'avenir. Je suis sûr que la générosité des dentistes canadiens sera à la mesure de ces espoirs et que ceux-ci aideront à les réaliser.

Octobre est le Mois du FCED. C'est l'occasion choisi pour chaque membre de la profession dentaire qui veut voir

celle-ci progresser de faire un don généreux au Fonds canadien pour l'enseignement dentaire. Votre appui sera d'autant plus apprécié qu'il est un besoin.

Tout don ou toute contribution doit être envoyé à l'adresse suivante: 44 Eglinton Ave., West, Toronto, Ont., M4R 1A1.

*Le président du
Conseil d'administration du FCED.
James A. Guest (DDS).*

Réalisations des conseils de l'ADC en 1981-1982

Mot du président



En tant que nouveau président, j'ai entièrement confiance que l'ADC, — à cause de l'expérience et des sages avis des présidents et des membres des conseils et des comités de l'association ainsi que de leur zèle pour maintenir un niveau d'excellence dans la profession, — continuera à servir la dentisterie canadienne de la meilleure façon possible durant la prochaine année.

Il va sans dire que je serai heureux de travailler en collaboration avec tous les membres des conseils et des comités pour continuer à améliorer la dentisterie en tant qu'organisation au Canada.

— Le Dr W.R. Thompson

Le conseil des matériaux et appareils dentaires

Les activités du conseil portent principalement sur la rédaction des normes et l'approbation des matériaux dentaires utilisés au Canada. À cette fin, ses membres travaillent en étroite collaboration avec l'Organisation internationale de normalisation (ISO), où ils sont délégués au niveau international, et l'Association canadienne de normalisation (Acnor), où ils siègent au niveau national, à titre de membres du comité technique de la médecine dentaire. Les membres du conseil participent aux réunions des deux organisations.

Le conseil est aussi fiduciaire du Fonds canadien de la recherche dentaire et choisit, à ce titre, le récipiendaire du prix qui est décerné à un

Les divers conseils de l'Association dentaire canadienne — Statuts et règlements, Matériaux et dispositifs dentaires, Éducation, Éthique, Soins de santé, Services hospitaliers, Services d'information, Nominations, Assurances et placements, Affaires étudiantes — ont, au cours de la dernière année, participé à des débats, trouvé des solutions et fait des recommandations touchant des sujets d'intérêt primordial pour tous ceux qui font partie de la profession dentaire au Canada.

Le Journal de l'ADC a invité les présidents et les représentants des conseils à présenter un bref rapport sur leurs activités et leurs réalisations en 1981-1982.

Voici ces rapports.

jeune chercheur d'une université canadienne. Le lauréat de cette année devait être désigné au mois de septembre, lors de la réunion du Bureau des gouverneurs, à Ottawa.

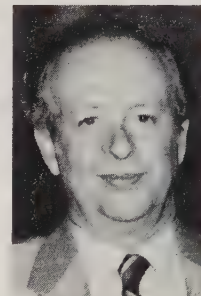
Le conseil entretient aussi des rapports étroits avec la Direction générale de la protection de la santé, à Ottawa, la Commission de consultation sur les appareils médicaux et les conseils de l'Association dentaire américaine. Il agit aussi à titre de consultant et de point de convergence pour toute question touchant les produits et appareils dentaires posée à l'Association.

— Le Dr Ralph Barolet

Les candidatures

Tous les postes éligibles et toutes les vacances ont été comblés par des can-

Hommage du président-sortant



Le Dr Williams Les rapports très succints que nous présentent aujourd'hui les présidents des divers conseils de l'ADC mettent en lumière quelques-unes seulement des nombreuses questions dont ils ont à traiter tous les ans. Ces aperçus des principaux résultats obtenus ne font pas nécessairement état de la participation du grand nombre de dentistes qui ont consacré bénévolement des centaines d'heures de travail à assurer la bonne marche de leurs conseils respectifs.

Certes, c'est sur la présidence que se tournent les regards au cours de l'année, mais le président ne saurait accomplir sa tâche ni l'ADC sa mission sans le soutien volontaire de tous ces bénévoles.

— Le Dr Donald E. Williams

didats éligibles pour l'exercice 1982-1983. L'élection a été tenue lors de l'assemblée annuelle du Conseil d'administration, qui a eu lieu les 24 et 25 septembre à Ottawa.

Les modalités de la mise en candidature ont été modifiées pour tenir compte de la représentation de l'ACHD et de l'ACAD aux conseils de l'éducation et des services de santé.

Le formulaire de mise en candidature a été révisé de façon à y indiquer l'organisme auquel appartient le candidat.

— Le Dr G.E. Utas

Le conseil des affaires étudiantes

Au cours de l'année, le conseil des affaires étudiantes a augmenté le nombre de ses membres qui est passé de six à quatorze. Toutes les facultés

de médecine dentaire du pays y sont maintenant représentées.

Le conseil a mené une campagne de recrutement des étudiants, élaboré un manuel sur les programmes d'études universitaires et post-universitaires, d'internat et de résidence, terminé la rédaction d'un manuel à l'intention des représentants des étudiants, entrepris la rédaction d'un manuel sur l'administration du cabinet du dentiste à l'intention des nouveaux diplômés, et lancé la publication semi-annuelle d'une lettre circulaire.

Le conseil tiendra sa prochaine réunion à l'occasion du congrès 1982 des étudiants en médecine dentaire du Canada, qui aura lieu du 6 au 9 octobre à l'Université Western Ontario, à London.

— Le Dr Peter Judd

Le conseil des statuts et règlements

Le conseil a réexaminé attentivement les statuts et règlements de l'Association et, compte tenu des avis juridiques qu'il a reçus, en a rédigé une version révisée qu'il a envoyée au Conseil d'administration pour obtenir son avis. Il en a aussi envoyé des copies aux membres corporatifs à titre d'information.

Les présidents des divers conseils ont également reçu la partie des règlements touchant le secteur de leur compétence et ont été invités à faire leurs observations.

Le conseil se propose d'examiner, au cours de l'automne, tous les commentaires qui lui auront été faits, puis il révisera de nouveau le document avant de la présenter au Conseil d'administration, lors de sa réunion du mois de mars 1983.

— Le Dr Donald MacDougall

Le Conseil des services hospitaliers

Présidé par le Dr M. Gornitsky de Montréal, le Conseil des services hospitaliers de l'ADC compte cinq membres: les Drs E. Cree (Montréal), K.M. Gordon (Edmonton), J.H. Gryfe (Toronto), W. Sussel (Chilivack) et G. Terriss (Halifax). Son

rôle est "d'aider les services dentaires dans les hôpitaux canadiens à maintenir des normes élevées." De plus, il "agrée les services dentaires et définit leurs fonctions ainsi que leurs responsabilités."

Au cours des dernières assemblées, le conseil a établi un système de classification pour l'agrément afin d'y apporter des spécifications tout en donnant une certaine souplesse à un mode d'évaluation plus normalisé des services dentaires hospitaliers. On pense que ce système de classification qui prévoit un agrément provisoire, un agrément conditionnel et un agrément complet des services visités, sera le prélude à une entente réciproque qui amènera l'Association dentaire américaine à accepter les normes d'agrément de l'ADC.

Étant donné qu'on n'a pas encore établi, au Canada, des normes touchant l'usage des stérilisateur de vapeur chimique non saturée dans les hôpitaux, le conseil a entrepris une étude attentive de cette méthode. Particulièrement adaptée pour les nombreux instruments dentaires utilisés communément, cette technique réduit considérablement la corrosion des tranchants faits d'acier au carbone, laquelle se produit lorsqu'on a recours à des méthodes qui créent beaucoup de vapeur d'eau.

Dans une tentative pour aider les administrateurs des programmes d'internat en médecine générale à se préparer pour les enquêtes d'agrément, le conseil est à mettre au point un manuel autodidactique. De plus, ce manuel pourra servir à la révision professionnelle permanente par le personnel des services qui donnent de tels programmes.

Le conseil a consacré beaucoup de temps et d'énergie à réviser et à évaluer les procédures actuelles touchant les enquêtes d'agrément. Parce que le nombre des hôpitaux qui ont demandé une première enquête s'est beaucoup accru et qu'il y en a de très nombreux qui doivent être visités à nouveau, le travail s'accumule considérablement et risque d'être coûteux.

Les changements apportés au programme normaliseront sans doute le calendrier des enquêtes ainsi que les équipes.

Les autres sujets discutés comprennent l'affiliation de l'ADC au Conseil canadien d'agrément des hôpitaux, les exigences dentaires dans les établissements de soins prolongés ainsi que les responsabilités des dentistes travaillant dans les hôpitaux, telles qu'elles sont définies dans les lois provinciales sur les hôpitaux.

— Le Dr J.H. Gryfe

Le conseil des services d'information

Le Mois national de la santé dentaire a été couronné de succès en 1982. On a distribué, cette année, 240 dossiers d'information de plus que précédemment aux associations provinciales et à d'autres organismes. La diffusion des affiches a aussi augmenté. Six provinces ont participé au concours national d'affiches. La chaîne Holiday Inn et les restaurants McDonald ont participé à la campagne à la grandeur du pays. Au mois de juin, on avait recueilli plus d'une centaine d'articles de journaux, dont beaucoup faisaient état du matériel diffusé par l'ADC.

Des ateliers sur les relations avec les médias ont été tenus à Ottawa et à Winnipeg, et les provinces de l'Atlantique ont manifesté le désir de suivre le cours.

L'ADC a distribué, au cours de l'année, près d'un demi-million de dépliants en langues anglaise et française.

— Le Dr Y. Kamachi

Le conseil des assurances et placements

Conformément à sa mission d'élaborer, de maintenir et d'améliorer les régimes d'assurance pour la profession, le conseil a déjà fait connaître plusieurs améliorations qu'il a apportées à ces régimes. En voici les principales.

- 1) Sont entrées en vigueur le 1^{er} janvier, une hausse de 10 p. 100 de la couverture de base de l'assurance-vie ainsi qu'une baisse

(Suite à la page suivante)

correspondante de 10 p. 100 de la prime d'assurance. La hausse est applicable sans examen médical et la couverture maximale de l'assurance-vie de base a été portée à 370 000 \$.

- 2) L'assurance-invalidité à long terme a été portée à un maximum de 4 000 \$ et une allocation de 10 p. 100 pour le coût de la vie est entrée en vigueur le 1^{er} janvier 1982. En outre, les participants admissibles ont été invités à se prévaloir d'une assurance-invalidité à long terme supplémentaire ou d'une assurance d'administration de 500 \$, sans examen médical.
- 3) La couverture de l'assurance d'administration a été portée à 6 000 \$, à compter du 1^{er} janvier 1982.
- 4) La couverture des meubles et équipements a été haussée de 10 p. 100 à compter du 1^{er} juillet 1982 pour couvrir l'inflation.
- 5) La couverture maximale de l'assurance offerte aux diplômés de 1982 a été augmentée pour tenir compte de l'inflation.
- 6) La gestion des placements du Régime enregistré d'épargne-retraite a été consolidée. Elle a été placée sous le contrôle du fiduciaire et la vérification du CDSPI.

— Le Dr J.E. Durran
Président du CDSPI

Le conseil des services de santé

Le conseil a, au cours de l'année, approuvé un système de numérotation à neuf chiffres pour remplacer le numéro d'assurance sociale si controversé qui apparaissait sur les formulaires de réclamation. Le nouveau numéro ne fait pas qu'identifier le dentiste, il indique aussi la province où il pratique, sa spécialité et à quelle catégorie de membres il appartient.

Le sous-comité de la protection contre la radiation, qui est présidé par le Dr Robert Janes, a mis au point un guide sur le contrôle de la radiation dans le cabinet du dentiste. Il incombe au conseil de coder les actes professionnels dont font état les formulaires de réclamation. Tous les ans, au fur et à mesure que sont mis au point de nouveaux procédés, le conseil ajoute les nouveaux codes en fonction du système à cinq chiffres qui a été mis au point.

Le conseil poursuit la mise à jour du guide concernant les régimes d'assurance dentaire pour les enfants, qui a été présenté à la réunion du mois de septembre du Conseil d'administration. Avec la participation du conseil des services d'information, il a pris des dispositions pour faire publier dans les magazines *Baby Talks* et *Best Wishes* un article sur l'alimentation et la prévention dans une perspective dentaire. Ces publications sont distribuées aux nouvelles mamans dans la plupart des hôpitaux du pays.

— Le Dr H.H. Horsman

Le Conseil de l'éducation

Ce conseil continue d'assumer du mieux qu'il peut ses responsabilités notamment en ce qui a trait à l'agrément. Il a pris des mesures pour assurer la mise à jour de toutes les lignes directrices et tout document pertinent, et accueillera toute suggestion utile pour améliorer la procédure d'agrément. Le mérite en revient au Conseil d'administration qui a eu la bonne fortune d'élire au conseil une équipe aussi dévouée et appliquée.

Le comité chargé des tests d'admission a travaillé fort au cours de l'année. Il a entrepris une étude sur la valeur des entrevues d'admission à la profession afin de les rendre uniformes. Il examine les rapports entre le résultat des tests qu'on fait subir aux étudiants et la qualité de leur pratique une fois admis dans la profession. Afin de les tenir au courant des nouvelles techniques d'entrevue, le comité a mis au point un programme d'ateliers de recyclage bisannuel, auquel il invite les facultés qui participent actuellement à l'étude de cette question.

Le conseil a mis sur pied un nouveau comité, celui de la formation, qui a été chargé d'examiner le rôle que l'ADC doit y jouer, de faire les études nécessaires et de lui présenter les recommandations qui l'aideront à préciser et à assumer ses responsabilités dans ce domaine.

— Le Dr D. Yeo

Que signifie l'ADC pour les spécialistes?

Les présidents et les représentants des différents groupes de spécialistes qui sont affiliés à l'Association dentaire canadienne ont récemment été invités à répondre à la question suivante: Que signifie l'ADC pour les groupes de spécialistes?

Voici leurs réponses.

L'Association canadienne des Dentistes en Hygiène Publique

Bien qu'il soit difficile pour une

association, surtout lorsqu'elle se trouve au niveau national, de tout représenter pour tous en tout temps, je souhaite que les membres de notre spécialité, en continuant à se joindre à l'Association dentaire canadienne, contribueront à en faire une organisation forte et puissante.

La nouvelle Constitution canadienne changera sans doute, dans les années à venir, l'essence même du droit qu'ont les législatures provinciales de

déléguer aux ordres professionnels provinciaux le pouvoir de diplômer des dentistes. Il en résultera certainement une liberté de mouvement et les dentistes auront le droit de travailler dans n'importe quelle province canadienne.

Quand ceci se produira, j'espère que les dentistes en hygiène publique, fidèles à l'ADC, auront une influence dans l'établissement des règlements fondamentaux et que l'intérêt du pu-

blic sera protégé. Pour s'assurer de ceci, il faut se joindre à l'ADC et y participer vraiment.

— Le Dr T.M. Curry

L'Académie canadienne de pédodontie

L'Académie canadienne de pédodontie remercie l'ADC de l'aide qu'elle lui a apportée en parrainant le 6^e congrès international de médecine dentaire pour les handicapés, qui a eu lieu à l'été de 1981, ainsi que le 4^e congrès canadien de médecine dentaire pour les enfants. En donnant son agrément aux programmes d'enseignement de la pédodontie offerts par l'Université de Toronto, l'ADC veille à maintenir les normes d'excellence de cette spécialité. Les pédodontistes apprécient également les articles que le Journal de l'ADC publie dans le domaine de leur spécialisation.

— Le Dr Howard Stein

L'Association canadienne des orthodontistes

Parmi les avantages que l'affiliation à l'ADC procure à notre association, il y a lieu de souligner l'excellence de la formation que le programme d'agrément assure aux diplômés qui se spécialisent en orthodontie. L'ADC offre aussi aux orthodontistes un régime d'assurance qu'ils pourraient difficilement se procurer autrement. Par ailleurs, les orthodontistes sont trop peu nombreux pour exercer des pressions adéquates et lutter contre les taxes et les tarifs défavorables. Nous avons donc besoin de l'aide de l'ADC à cet effet.

— Le Dr J.L. Ares

L'Association des prosthodontistes du Canada

L'Association des prosthodontistes du Canada reconnaît l'Association dentaire canadienne comme le truchement qui lui permet de faire valoir les intérêts de cette spécialité à l'échelle nationale. Elle a donc le devoir de donner à l'ADC les avis que celle-ci lui demande en matière de prosthodontie. Si elle reconnaît que les spécialistes dispensent un grand nombre de soins dentaires et qu'ils sont fort

nombreux au Canada, il va de soi que l'ADC serve d'intermédiaire pour assurer la communication entre les spécialités de même qu'entre les spécialistes et les dentistes de pratique générale. C'est pour veiller à l'intérêt général que les spécialités ont été créées et l'ADC a prévu, dans son organisation, des sections pour les accueillir. C'est en maintenant les services, par la communication et la collaboration, que l'ADC continuera d'être le seul porte-parole de la profession au Canada, la voix des spécialistes et des généralistes.

— Le Dr Douglas Chaytor

L'Académie canadienne d'endodontie

Si l'on a grandement sous-estimé l'importance de l'Association dentaire canadienne dans le passé, les dentistes et les spécialistes de la médecine dentaire, tels les endodontistes, devraient se demander sérieusement où ils en seraient sans ce grand frère qui veille à leurs affaires. De la reconnaissance fondamentale des spécialités aux rapports constants avec les gouvernements et les tierces parties, l'association mère veille constamment et sans bruit à nos intérêts. La profession de la médecine dentaire et ses groupes de spécialistes n'auraient pas aujourd'hui la position enviable qu'ils occupent n'eût été de l'Association dentaire canadienne.

— Le Dr Marshall Peikoff

L'Association canadienne de chirurgie buccale et maxillofaciale

Dans le dernier numéro de sa publication, l'Association canadienne de chirurgie buccale et maxillofaciale nous apprenait que tous ses membres faisaient également partie de l'Association dentaire canadienne.

Comme tous les autres membres de l'ADC, les chirurgiens de la bouche tirent avantage des négociations de l'Association avec le gouvernement (mesures de lutte contre l'inflation, normes professionnelles, soins dentaires aux Inuits, etc.), ainsi que des travaux de ses différents services (CDSPI, questions fiscales, congrès, journal, bibliothèque, etc.).

En outre, les chirurgiens de la bouche qui font aussi de l'enseignement, apprécient le programme d'agrément du conseil des services hospitaliers, qui maintient l'excellence des programmes de résidence et des soins dentaires.

"L'Union fait la force", voilà le mot de passe. Les spécialistes de la chirurgie buccale auront toujours besoin du soutien de l'ADC, surtout en 1986, alors que se tiendra au Canada le IX^e congrès international de chirurgie buccale.

— Le Dr Huan Pham

L'Académie canadienne de pathologie buccale

C'est en 1972 que, se rendant à la proposition de l'Académie canadienne de pathologie buccale, l'Association dentaire canadienne a reconnu cette discipline comme spécialité de la médecine dentaire. L'Académie est une petite société qui regroupe les pathologistes de la bouche du pays, environ 25, et quelques autres dentistes intéressés à cette discipline. Elle se réunit annuellement, ordinairement avec l'Académie américaine de pathologie buccale, et s'intéresse à tous les aspects de la discipline au pays, notamment en ce qui a trait à la pratique de cette spécialité et à son enseignement aux niveaux universitaire et post-universitaire. Au début de 1982, elle a tenu, à Ottawa, une conférence sur l'enseignement de la pathologie buccale au niveau universitaire. Elle s'est déroulée sous les auspices de l'ADC et a donné lieu à l'établissement de lignes directrices qui ont été présentées au Conseil de l'éducation. L'Académie canadienne de pathologie buccale présente annuellement à l'ADC un rapport de ses activités, qui comprend également des observations et parfois des recommandations sur des sujets qui la concernent.

— Le Dr J.H.P. Main

L'Académie canadienne de parodontologie

Selon les membres de notre spécialité, les sujets politiques et la surveillance des actions du gouvernement fédéral relèvent de l'Association den-

(Suite à la page suivante)

Suspension du régime dentaire en C.-B.

Le régime d'assurance dentaire de la Colombie-Britannique a été suspendu à la suite des restrictions financières imposées par le gouvernement de la province.

La suspension est entrée en vigueur le 1^{er} septembre dernier.

"Nous sommes très déçus que le gouvernement ait cru bon de prendre cette mesure," a déclaré le Dr Donald Markey, président du Collège des chirurgiens dentistes de la Colombie-Britannique. Lorsqu'on a su que le régime serait suspendu, a-t-il dit, on a rencontré plusieurs fois le ministre de la Santé, M. James Nielsen, afin de l'exhorter à "faire des coupures" au lieu de mettre fin temporairement à tout le régime.

Cette suspension couvrira toute la période des restrictions financières, soit deux ans, de dire le Dr Markey.

"À proprement parler, le régime est

mis de côté pour deux ans. Il s'agit d'une suspension, non d'une abolition," a-t-il ajouté. Cependant, il ne cache pas ses doutes à ce sujet.

Réduction des honoraires

Tous les professionnels de la santé qui ont des ententes avec le Ministère de la Santé, y compris les membres du Collège des chirurgiens dentistes, doivent accepter une réduction de leurs honoraires de 12 à six pour cent pour les services rendus dans les hôpitaux. Cette réduction est entrée en vigueur le 1^{er} septembre également.

Le Ministère a honoré son entente originale touchant une augmentation de 12 pour cent. Signée en mars dernier, cette entente couvre la période du 1^{er} avril au 31 août. Le gouvernement a retenu dix pour cent de cette augmentation, attendant de savoir combien sévères devraient être les restrictions financières.

Protection des assistés sociaux

Originellement, le régime couvrait les soins dentaires des enfants de 14 ans ou moins, des gens âgés de 65 ans ou plus, des personnes à faible revenu ayant droit au secours et des assistés sociaux.

Seuls ces derniers, protégés par l'intermédiaire du Ministère des ressources humaines, verront leurs soins encore garantis.

Toutefois, de l'avis de Ken Croft, directeur exécutif du collège, le régime comportait certaines lacunes. "Le gros de la main-d'oeuvre n'était pas couvert," et une grande majorité des enfants de la province étaient protégés en vertu de régimes dentaires privés.

Instauré en janvier 1981 seulement, le régime avait été défendu par le collège depuis 1978.

Que signifie l'ADC (suite)

taire canadienne qui, en tant qu'organisation nationale, est la mieux placée pour traiter ces questions. Il est de plus en plus important que l'ADC, agissant au nom de la dentisterie canadienne, entretienne un rapport avec les autorités fédérales et voie à renverser toute mesure contraire. Par ailleurs, nous croyons que le Journal de l'ADC constitue un bon moyen de direction et un excellent médium pour échanger des opinions et des renseignements d'intérêt professionnel. En nous informant sur ce qui se fait dans les autres provinces du Canada, il accomplit un travail utile. Et les articles sur la parodontologie suscitent un immense intérêt parmi les membres de notre spécialité.

— Le Dr Harvey Freedman

L'Académie canadienne de radiologie buccale

Il est bon que les groupes de spécialistes soient placés sous la protec-

tion de l'Association dentaire canadienne et que celle-ci fasse circuler les renseignements et les préoccupations diverses parmi les spécialistes et les praticiens généraux.

Il est probablement heureux que les groupes de spécialistes se réunissent en même temps que les membres de

l'ADC, mais dans notre cas, septembre est un moment inopportun parce que, d'ordinaire, nous sommes à l'université et sommes très occupés.

Bref, les avantages de notre affiliation à l'ADC compensent largement les quelques inconvénients possibles.

— Le Dr John A. Reid

Régime d'épargne-retraite de l'ADC

Les valeurs respectives du Régime d'épargne-retraite de l'Association Dentaire Canadienne étaient les suivantes au 31 août 1982.

Fonds d'actions ordinaires	\$51.1399
Fonds à revenu fixe	\$29.6552
Fonds garanti	\$24.2083
Fonds de placement	\$11.1450

L'avoir total (valeur marchande) du régime s'élevait à \$30,453,622.

Au 31 juillet 1982, les chiffres du mois précédent étaient les suivants:

Fonds d'actions

ordinaires	\$45.8813
Fonds à revenu fixe	\$28.1830
Fonds garanti	\$23.9132
équilibré	\$10.3018

L'avoir total (valeur marchande) du régime s'élevait à \$28,658,959.

Pour de plus amples renseignements, veuillez écrire à l'adresse suivante: Canadian Dental Service Plans Inc., Ste. 600, 2 Lansing Square, Willowdale, Ontario M2J 4Z3, ou appeler le service de renseignements du CDSPI en composant 1-800-268-5418 (497-7171 pour les résidents de Toronto).

En bref —

Le conseil des ministres de la Colombie-Britannique vient de créer, par un arrêté ministériel, une commission de denturologie qui a pour mandat d'administrer la loi touchant les denturologistes et les techniciens dentaires de la province.

La nouvelle commission, qui compte cinq membres, ne comprend aucun dentiste, malgré la demande faite en ce sens par le collège des chirurgiens dentistes de la province.

Le ministre provincial de la Santé, M. James Neilsen, a confirmé, dans une lettre adressée au collège, qu'il n'avait pas l'intention de nommer de dentiste à la commission.

Le Dr Ronald Markey, président du collège, a fait savoir au Journal de l'ADC que son organisme avait bien l'intention de demander au ministre "pourquoi."

♦♦♦♦♦♦♦♦

La législature du Nouveau-Brunswick se propose d'établir une nouvelle loi "parapluie" sur les disciplines de la santé qui serait administrée par une commission composée d'une seule personne.

Les groupes directement touchés ressentent ce projet comme une trahison.

"Nous n'avalons pas cette pilule," a déclaré le Dr J.G. Thompson, secrétaire général de la Société dentaire du Nouveau-Brunswick. Cette personne "pourrait être n'importe quelle rosse. La personne en vue serait probablement acceptable. Mais après elle... qui sait?"

"Ce n'est pas ce que nous recommandons," a-t-il ajouté, faisant allusion au consensus d'opinion entre les 17 groupes de la santé du Nouveau-

Brunswick, y compris les techniciens dentaires, les dentistes, les médecins, les prothésistes, les travailleurs sociaux, les diététiciens, les infirmières et les assistantes agréées, les thérapeutes professionnels, les optométristes et les techniciens en radiologie.

Nous avions espéré, a-t-il poursuivi, que le bill 44, qui a déjà été lu deux fois à la législature, aurait établi "au moins un jury composé des principaux représentants des services de santé" comme commission.

Le bill que le gouvernement veut imposer comme une "loi exemplaire" remplacerait les divers règlements privés adoptés il y a plusieurs années pour légiférer les professions de la santé.

♦♦♦♦♦♦♦♦

Le Dr Maureen M. Law, sous-ministre adjoint de Santé et Bien-être Canada, a été élue présidente de l'exécutif de l'Organisation mondiale de la santé. Elle a assumé ses nouvelles fonctions au cours d'une réunion récente de l'exécutif qui a eu lieu à Genève (Suisse). C'est la première femme à être élue à ce poste.



Le Dr Maureen Law

Originaire de Calgary, le Dr Law a obtenu son doctorat en 1964 de la faculté de médecine de l'Université Queen's. Elle a accédé au conseil exécutif de l'OMS en 1980 et succède au Dr John Hiddlestone, de la Nouvelle-Zélande, directeur général.

Elle est entrée au ministère de la Santé et du Bien-être en 1974, à titre de directrice du Développement des services de santé communautaires. En juillet 1978, elle devenait sous-ministre adjoint responsable de la promotion et des services de la santé. Ce secteur s'occupe des responsabilités fédérales en ce qui a trait à la promotion de la santé et du bien-être des Canadiens, à la prévention de la maladie et de l'incapacité, à l'assurance santé, à la recherche et à la consultation sur les services de santé.

♦♦♦♦♦♦♦♦

Aux États-Unis, l'incidence de la carie dentaire a été réduite de près de la moitié chez les enfants de cinq à 17 ans, au cours de la dernière décennie, indique une étude menée récemment par l'Institut national de la recherche dentaire auprès de 38 000 écoliers de ce pays.

En conséquence, le revenu de certains dentistes a baissé considérablement.

Selon le Dr John Stamm, du département de dentisterie communautaire à l'Université McGill de Montréal, "il en va à peu près de même dans presque toutes les régions du Canada."

Récemment, une étude menée par le ministère provincial de la santé indiquait qu'en Colombie-Britannique, l'incidence de la carie dentaire avait baissé de près de la moitié. "Mais il n'en est pas ainsi partout au pays," de dire le Dr Stamm.

Cette baisse est attribuable à la fluoration de l'eau dans les collectivités ainsi qu'aux produits contenant du fluorure mis en vente dans les établissements.

En conséquence, le revenu que les dentistes tirent de la réparation des dents cariées a baissé lui aussi.

Le Dr Stamm croit cependant que le revenu des dentistes s'est généralement maintenu, parce qu'ils ont adapté leurs soins de façon à faire davantage de travail préventif en périodontie.

"C'est ce genre d'adaptation qu'ils doivent apporter à long terme à leur

(Suite à la page suivante)

pratique, et je crois qu'ils ont déjà commencé de le faire," dit-il.

L'atelier parrainé par le *Bytown Study Club* et tenu à Ottawa, du 23 au 25 septembre, a réuni environ 20 dentistes. Ils ont appris à donner des cours en éducation permanente et ont été initiés au système informatisé MEDLINE intégré à la bibliothèque de l'ADC.

L'atelier a été ouvert par le Dr Robert H. Rasmussen, docteur en éducation, professeur adjoint à l'École dentaire de l'Université de l'État de la Louisiane et adjoint du recteur du Centre médical de la même université.

Les objectifs de l'atelier étaient les suivants: l'examen des éléments fondamentaux de la connaissance et de l'enseignement, des exercices pour explorer ses aptitudes à apprendre et à enseigner, l'analyse de certains aspects des projets de recherche et l'application des connaissances acquises à la vie professionnelle.

De l'avis du président du club, le Dr John F. Miner, l'atelier "a été précieux pour chacun des dentistes présents et utile pour l'enseignement du personnel de leur cabinet."



Le Dr Robert H. Rasmussen.

Par ailleurs, a-t-il ajouté, on a demandé aux participants de choisir un sujet bref et bien défini, puis de réviser les titres rattachés à ce sujet fournis par MEDLINE. Une fois les

données en main, chacun a fait un exposé que leurs confrères et l'instructeur ont eu à juger à titre d'exercice pédagogique.



Le Dr Catalena Birek

La récipiendaire du prix de la Fondation canadienne de recherche dentaire pour 1981 est le Dr Catalena Birek, docteur en philosophie et en médecine dentaire, qui est une chercheuse attachée au groupe du Conseil de recherches médicales en physiologie parodontaire et qui travaille à la Faculté dentaire de l'Université de Toronto.

La présentation du prix a eu lieu le 24 septembre, au cours de l'assemblée annuelle du Conseil d'administration de l'ADC, et elle a été faite par le président sortant, le Dr Donald E. Williams.

Celui-ci a également remis au Dr A.R. Ten Cate, doyen de la Faculté dentaire de l'Université de Toronto, le prix d'institution.

Le Dr Birek s'est mérité le prix pour son étude intitulée: "Dome Formation by Oral Epithelia in Vitro."

Elle a reçu une plaque gravée de la FCRD et un chèque de mille dollars.

Récemment, deux dentistes du Nouveau-Brunswick ont dû administrer des soins d'urgence pour le moins inaccoutumés. Sahib, un élé-

phant d'Asie pesant 7 000 livres, âgé de 12 ans et appartenant au *Martin and Downs Tent Circus*, souffrait d'un mal de dent éléphantique... causé par une énorme cavité au bout d'une de ses défenses brisées.

Sahib était affligé depuis longtemps par ce problème et, chaque fois, les vétérinaires ne trouvaient mieux à faire que de nettoyer la défense avec des antibiotiques et des désinfectants ainsi que d'injecter des antibiotiques au pauvre animal. Cette fois cependant, un vétérinaire a décidé qu'il s'agissait d'un problème dentaire et a fait appel au dentiste de Hampton, le Dr William Rector.

Assisté par son collègue, le Dr Ralph Richards, le Dr Rector s'est présenté "au chevet" du malade avec une grande bouteille d'oxyde de zinc et de la pâte d'eugénol pour l'obturation. De plus, il avait rassemblé divers outils qu'il avait mis, pour l'occasion, dans sa "trousse pour éléphant."

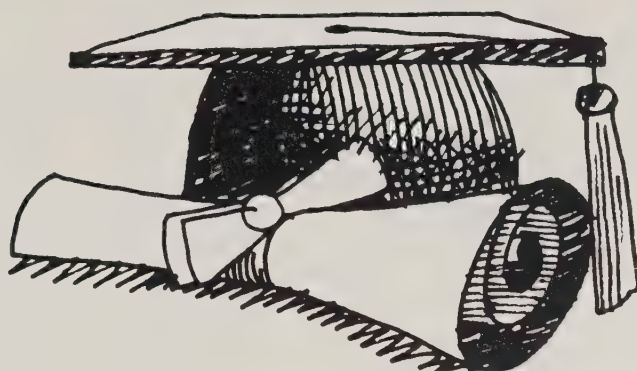
L'obturation est temporaire. Les deux dentistes doivent encore examiner Sahib prochainement, enlever l'obturation et s'assurer que l'infection a disparu. Ensuite, ils obtureront la cavité de façon permanente.

Le Dr Norman Levine, professeur et chef du département de Pédiodontie à l'Université de Toronto, a été désigné président-élu de l'Association internationale de médecine dentaire pour les handicapés, lors du sixième congrès de l'association qui a eu lieu du 20 au 25 juillet à Toronto.

Ont également été élus à l'exécutif de l'association: le Dr Haim Sarnat, d'Israël, président sortant; le Dr Erling Böhlin, de Suède, président; le Dr Peter Westphal, de Suède également, secrétaire-trésorier; le Dr Susumu Uehara, du Japon.

Le Dr Levine a aussi été élu au conseil d'administration de l'Académie de médecine dentaire pour les handicapés, dont le président est le Dr Len Smith, de Calgary. L'académie constitue l'aile nord-américaine de l'association et regroupe les membres des États-Unis et du Canada.

VOUS QUI ÊTES UNE PERSONNE CULTIVÉE...



Vous qui avez droit à un titre respecté, au sein d'une profession hautement estimée

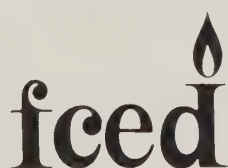
Vous qui bénéficiez d'un riche héritage, provenant des personnes cultivées qui vous ont précédées

Vous qui faites partie d'une tradition ancienne

A tous ces titres, vous avez le devoir de préserver et de transmettre cet héritage aux générations futures.

Lorsque vous contribuez au Fonds canadien pour l'enseignement dentaire, vous participez à la protection des normes et du prestige de votre profession, car vous secondez les programmes du FCED qui portent sur l'enseignement et sur les soins dentaires. Si vous n'avez pas encore contribué au FCED cette année, veuillez envoyer votre don (déductible aux fins d'impôts) au:

Fonds canadien pour l'enseignement dentaire
Bureau 205
44 ouest, avenue Eglinton
Toronto, Ontario M4R 1A1.



Le Fonds canadien pour l'enseignement dentaire
Un véhicule destiné à valoriser les réalisations
et le prestige de la profession.

L'électrochirurgie dentaire:

Fekri S. Osman, P.Eng.

L'électrochirurgie consiste à faire passer intentionnellement des courants électriques de haute fréquence à travers des tissus de l'organisme pour des résultats chirurgicaux contrôlables. C'est un moyen de produire une chaleur localisée dans les tissus. En variant les méthodes d'application, la chaleur peut être concentrée de façon contrôlée et être utilisée soit pour couper des tissus, soit pour faire coaguler des vaisseaux sanguins.

Tout appareil électrochirurgical comprend:

1. un générateur de pouvoir électrique à haute fréquence,
2. un montage et des dispositifs électroniques permettant de contrôler la durée, le mode d'opération et l'intensité de l'application,
3. des câbles et des électrodes pour faire passer le courant de haute fréquence dans l'organisme du malade.

En dentisterie, l'électrochirurgie s'est révélée pratique quant au problème de l'espace dans la bouche. Grâce aux nombreux modèles de conducteurs électriques, il est aisé pour le chirurgien dentaire d'avoir accès à toutes les parties de la cavité buccale, ce qui lui permet d'inciser ou d'enlever des tissus mous rapidement et simplement. De plus, il peut travailler à sec, étant donné que les vaisseaux sanguins sont scellés par coagulation. Il en résulte une économie de temps précieux durant l'opération et une diminution des risques de contamination.

L'électrochirurgie dentaire est employée quotidiennement pour divers usages dont l'enlèvement de tissus, la stérilisation des canaux radiculaires, les hémostases, le blanchiment des dents et les opérations parodontales.

Plusieurs dangers sont associés à l'électrochirurgie, y compris les brûlures accidentelles au patient et au personnel assistant, les électrocutions, les décharges électriques, le mauvais fonctionnement de l'équipement ainsi que l'interférence électrique avec d'autres instruments médicaux comme les stimulateurs cardiaques ou les appareils pour surveiller les malades.

En électrochirurgie dentaire, il y a un autre danger, à savoir le degré de pénétration de la chaleur dans les tissus adjacents. Ce facteur doit être pris en considération à cause des limitations anatomiques buccales causées par les très minces tissus gingivaux recouvrant le périoste, lequel est attaché à l'os qui contient des dents vitales. Lorsque la chaleur pénètre à une profondeur dépassant quelques couches de cellules tissulaires, elle peut devenir destructive, ce qui doit être évité.

Il est très important d'être conscient des complications liées à l'électrochirurgie. Voici quelques précautions à

prendre qui peuvent être utiles pour réduire les risques et pour améliorer la sécurité tant des patients que du personnel assistant.

1. Si le résultat chirurgical n'est pas atteint quand l'appareil est réglé de la façon accoutumée, il ne faut pas le régler de manière à donner plus de pouvoir. Dans ce cas, on essaiera plutôt de savoir pourquoi l'appareil fonctionne mal ou on le remplacera. Un pouvoir excessif peut prolonger la guérison d'une blessure ou augmenter les risques d'infection à cause d'un excès de tissus carbonisés ou dévitalisés là où a lieu l'opération.
2. On ne doit pas utiliser d'appareils électrochirurgicaux pour les patients qui portent des stimulateurs cardiaques internes. Si l'électrochirurgie s'impose, il est recommandé de disposer d'un stimulateur externe et de personnes capables de le faire fonctionner immédiatement au besoin.
3. On demandera au patient d'enlever tout objet en métal qu'il porte, comme les bijoux par exemple. Ces objets peuvent concentrer les courants de haute fréquence et causer des brûlures.
4. On doit vérifier tous les câbles et toutes les prises avant chaque utilisation pour s'assurer qu'il n'y a ni ruptures ni fissures. On les remplacera au besoin.
5. On ne doit ni stériliser ni réutiliser les accessoires électrochirurgicaux jetables.
6. On ne doit pas recourir à l'électrochirurgie dentaire si l'on utilise des anesthésiques inflammables.
7. Il faut se méfier des mauvais fonctionnements possibles lorsqu'un appareil d'électrochirurgie a été échappé ou frappé contre une porte ou un mur. Tous les appareils qui ont subi des heurts semblables doivent être vérifiés par un technicien compétent.

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- 3 Osman, F.S., Johnson, D.L., "Hazards of Electrosurgical Devices — Some Case Reports", 33rd Annual Conference for Engineering in Medicine and Biology Proceedings, September 1980.
- 4 Osman, F.S., "Burns and the Electrosurgical Unit", 17th Annual Meeting of the Association for the Advancement of Medical Instrumentation Proceedings, May, 1982.

The Science and Art of Dental Ceramics

John W. McLean

Quintessence Publishing Co.
33 pages

Volume I: The Nature of Dental Ceramics and Their Clinical Use

A number of texts exist which deal with crown and bridgework, fixed partial dentures or dental materials science. It is clear, however, that this book gathers together material which is not readily available in another single textbook. Much of the content stems from the author's own research and clinical interests. John McLean brings to this publication the vast experience gained during both a clinical and scientific career in which he has always had a close affinity for the aesthetics and beauty of porcelain work.

Volume I originally appeared in separate monographs developed from the courses given by Dr. John McLean at the State University School of Dentistry, Louisiana. It is claimed that the book is written principally for the serious student or researcher in dental ceramics and to assist the dental technician in a better understanding of his craft. This book belongs on the shelf of all who are in any way involved in the practice of dentistry whether it be as a clinician, a teacher, a researcher or technician.

The author attempts to redress the balance in the swing away from the all porcelain jacket crown. As stated in the introduction, "the metal-ceramic smile" is more common than we perhaps would care to admit. Dr. John McLean readily acknowledges the skill and inspiration of his excellent technicians.

The book is extremely well illustrated by some 332 illustrations of excellent quality, 59 of which are in full colour. A total of some 176 references provides a useful background for the serious reader.

Monograph 1 deals with the nature of ceramics. An explanation of the glassy and crystalline state are presented by means of consideration of the atomic structure. The nature of glasses and glass formation, and the composition of dental porcelains are presented. The basic fundamental properties which affect feldspathic porcelain such as fritting, devitrification, thermal expansion, colour pigments, opacifying agents are dealt with in a clear, concise manner. The effect of particle size, vacuum firing and other factors affecting the translucency of feldspathic porcelains are also discussed. This is the shortest section in the book and is well presented.

Monograph 2 deals with the strengthening of dental porcelain. The author discusses crack propagation in dental porcelain together with methods which have been used to evaluate mechanical properties. The various methods used for strengthening dental porcelain are discussed in some detail, such as the enamelling of metals, dispersion strengthening of glasses and the use of ion exchange for producing a prestressed surface layer. It is refreshing to see the correct use of terminology dealing with noble metals and base metals rather than the use of such terms as precious and nonprecious alloys. The various alloys used are discussed in detail although recent developments in the types and numbers of alloys on the market perhaps make this section slightly out of date. The nature of the metal to ceramic bond is discussed at some length and considerations are given to the types of bond test methods which have been used to evaluate such systems.

McLean, who revolutionized dental ceramics with his aluminous porcelain development in 1965, has also developed a tech-

nique for the bonding of porcelain to an oxidized tin-plated platinum foil. The electroplating of a thin surface of tin .2 to 3 micrometers on to the surface of the platinum foil when oxidized provides the capability of bonding the ceramic to the platinum foil using the same principle as in the bonding of ceramics to metal castings. The ceramic bonded to the oxidized tin-plated platinum foil crown derives its main strength from the internal metal surface which will prevent micracks normally present on the ceramic surface from propagating as a result of functional stresses operating in a moist environment. The combination of clinician and researcher is ideally illustrated by the bringing together of the scientific and clinical aspects of the ceramic art in this chapter. The chapter also deals with the ion exchange process which can be used to chemically strengthen the surface of dental ceramics.

Monograph 3 deals with the aesthetics of dental porcelain and it is not difficult to realize from the emphasis given to this section that this is very close to the author's heart. There are some 69 illustrations in this section, 29 of which are in full colour. The chapter first deals with the nature of light and color measurement and the optical properties involving reflection, opacity, translucency and fluorescence. This section also deals with color blending and the color reproduction in natural teeth. The author addresses the problems of high reflection which can be troublesome with metal ceramic systems. An excellent section deals with the role of opaque porcelains in obtaining aesthetics. A practical aspect involves tooth shade guide requirements and shade matching. A lucid explanation of the relationship between hue, chroma and value is presented. The chapter finally

(Continued on following page)

deals with tooth contour and aesthetics, and the problems encountered in full mouth reconstruction. Once again, this section links together both the scientific, clinical and artistic elements of the subject.

Monograph 4, which is in fact the largest section in the book, deals with porcelain as a restorative material. This section covers 147 pages and has 204 illustrations, 28 of which are in full color. The author deals with the question of plaque accumulation on restorative materials and the marginal fit of complete porcelain crown restorations, both of which have implications for periodontal problems. The question of micro-leakage under porcelain crowns is discussed relative to the solubility of cements. The very controversial subject area involving occlusion and dental porcelain is well presented. The indications for using gold or porcelain in occlusion is well presented. The advantages for and against the 'all porcelain' jacket crown, the 'metal ceramic' crown and the 'aluminous porcelain' crown are presented in this section.

Some five clinical cases are used to illustrate the versatility of porcelain. The color photographs in this section are excellent.

This section also deals with the preparation and design factors for metal ceramics and porcelain crowns, together with the question of stress analysis and its effect upon design. A very practical section deals with the preparation and operative techniques, and types of instrumentation. The author discusses methods for optimising the aesthetics and maintaining the marginal fit of the labial and buckle porcelain crown margins. The question of whether to use a shoulder versus a bevel is also well presented. Recommended designs for the preparation of metal copings are well presented and illustrated. The author highlights common faults which can occur in the design of preparations. The biological considerations were addressed at the be-

ginning of this section and also are highlighted again towards the end when biological considerations are further discussed. The selection and use of various impression materials is discussed and once again the common causes of failure in the technique are addressed. A section on cementation is also quite useful, highlighting the various types of cements together with recommendations for clinical use and manipulation.

There have been a few developments and increased use of some of the newer types of alloys,

impression materials and cements which will no doubt be addressed in future revisions of this excellent book.

This book should be read by every dentist and technician whose practice involves the use of porcelain restorations. The book proves and illustrates beyond doubt that ceramics is indeed both an art and a science and the book brings the two together with perfection.

This book was reviewed by Derek W. Jones, Professor and Head, Division of Dental Biomaterials Science, Dalhousie University.

Endodontic Practice

Louis I. Grossman

*Tenth Edition
Lea & Febiger
Philadelphia, PA
\$31.75, 458 pages*

Since its first edition in 1940, Dr. Grossman's text has been the standard by which all other endodontic texts have been judged. Other books may be larger, better illustrated or go into more detail but none are more practical for either the student, general practitioner or endodontist.

It is an indication of the international recognition given to Dr. Grossman that his texts have been translated into Chinese, Portuguese, Spanish, Persian, Italian, German and Japanese.

The entire gamut of endodontic treatment is encompassed in this, the tenth edition. Prevention of pulpal damage is stressed in the chapter on diseases of the dental pulp and this is one area that general practitioners should read very thoroughly. We are then carried through the complete endodontic discipline such as diagnosis, rationale of treatment, and all the

essential procedures essential to success including surgery, re-plants and implants.

No one in the history of endodontics has had a greater influence on the development of this specialty than Dr. Grossman. His text recapitulates the struggle to overcome the disproved "Focal Infection Theory". He stresses the necessity of a sterile technique and an obturation that will strive for a hermetic seal. The bibliographies at the end of each chapter are replete with credits to the many men who have made important contributions.

This edition has been brought up-to-date with the inclusion of a number of accepted innovations in endodontics such as the McSpadden Compactor for obturation, overlay dentures and even a discussion of the controversial N2 technique. The appendix entitled "Aids to Endodontics" presents 52 points which are of inestimable value in preventing and solving problems which can be encountered in endodontic practice.

This book was reviewed by Isadore Wolch, DDS, Winnipeg, Manitoba.

Dental Anatomy and Embryology

J. W. Osborn (Ed.)

Blackwell Scientific Publications
Oxford

1981, 447 pages, \$33.00

When this book was first shown to me by a Mosby representative (the distributor of Blackwell publications), I felt that this might well be the up-to-date volume that covered in detail the material I felt should be included in an Oral Anatomy course for first year dental students. A perusal of the back cover revealed that it had been written as part of a three-volume series, *A Companion to Dental Studies*, to provide "the undergraduate and recent graduate with the background for an appreciation of the scientific foundation of dentistry."

The contents revealed that the subjects ranged from embryology through genetics, growth and aging, the evolution of the dentition, histology of dental tissues, development and occlusion to the evolution of man, with a chapter devoted to the comparative anatomy of the dentition and one to human tooth morphology. At the moment, it requires readings from several excellent volumes to approach the material included in this one. For instance, *Peyer's Comparative Odontology* is the best single source for information on the evolution and comparative aspects of the vertebrate dentition, Ten Cate's *Oral Histology* is the definitive text for oral histology and the development of the dentition, and Swindler's *Dentition of the Living Primates* is required to appreciate primate dentition. Many other topics, such as human dental variation, genetics, and growth and development, are scattered throughout a myriad of journal papers and monographs.

I asked myself, as I read this volume: "Is this single volume able to replace or supplement several sources and bring a cohesiveness to oral anatomy that has eluded us before?" The answer is, "Yes,

but..." Yes, it does bring together the view of 21 experts in their fields who present their knowledge in a extremely lucid, readable style. But the volume also suffers from having so many contributors. For instance, if one were interested in the racial variation in tooth shape and size, it would require reading material in chapter 5, Tooth Morphology, and then turning to chapter 11, Evolution of Man, to complete the subject matter. If, on the other hand, you were interested in tooth wear, you would skip from chapter 5 to chapter 6, Dental Tissues, to chapter 9, Development and Maintenance of Occlusion, to chapter 10, Dentition in Function, to chapter 11.

Another apparent omission, which will be frustrating to some readers, is the lack of a thorough discussion of the place of *Australopithecus afarensis* in the evolution of man. If the reader wants an overview of man's evolution from this volume, he may feel that it is somewhat outdated because of only fleeting reference to *afarensis*, although this nomenclature was proposed at least four years ago. However, it should be noted that this area is changing rapidly, and it is difficult for any general summary to be up-to-date.

Two other minor points should be noted. First, the line drawings are not always close to the text which refers to them. This necessitates a constant referral back to illustrations on different pages. I also feel that, in some places, the drawings are superfluous, while additional illustrations at others would be helpful. Secondly, I would have preferred that several illustrations were labeled with their orientation. While it may be obvious to one who reads the text from cover to cover which direction is buccal or lingual, it may not be clear to someone who goes directly to an illustration without the benefit of reading the introductory material.

These shortcomings are minor

in comparison to the overall strength of the volume. It is possible to go to the excellent index and find page references to most subjects. It is a text which covers many areas not usually included in North American texts but which are germane to the understanding of teeth, occlusion, development and function. However, the book is difficult to place in the life-long curriculum of a dental practitioner. I believe it is somewhat overpowering for North American dental students who are taught the "basics" of oral anatomy first. Then, when they are interested, they pursue more in-depth studies. It is a desire for further education that will attract practitioners to this volume. With suggested further readings at the conclusion of each chapter, the reader, after obtaining a firm understanding of oral anatomy in its widest sense, can continue even further.

There are three excellent texts to which I often refer, Widdowson's *Special or Dental Anatomy and Physiology and Dental Histology*, Kraus, Jordan and Abrams' *Dental Anatomy and Occlusion*, and Scott and Symons' *Introduction to Dental Anatomy*. I feel that Osborn's text has added another dimension to the study of oral anatomy which is at least on a par with these and, certainly, more current texts.

I recommend this volume to students of oral anatomy and dental anthropology as a reference text, and suggest to them that they retain it for further study during their careers. To those in practice, I also highly recommend it; we all need to know more about the background of the organ we are treating. Maybe this text will herald the beginning of a quiet revolution in the approach to teaching oral anatomy in North America. I hope so.

This book was reviewed by John T. Mayhall, Professor of Oral Anatomy and Anthropology, University of Toronto.

INSTRUCTIONS FOR CONTRIBUTORS

(Scientific articles)

Previously unpublished articles, critical reviews of material on advances in dentistry and clinical reports are welcomed by the Journal of the Canadian Dental Association for consideration for publication. Material is accepted by the Journal on the understanding it is submitted solely to this publication.

SCIENTIFIC ARTICLES: should not exceed 2,500 words with a minimum number of illustrations, diagrams, photographs, tables or graphs. An average of 20 references is acceptable.

MAJOR REPORTS: are longer contributions dealing with diagnosis and treatment of dental disease, studies in education, clinical and laboratory research and other detailed investigations pertinent to dentistry and related fields.

CLINICAL REPORTS: are brief (up to 1,500 words) reports, case histories and clinical observations. References should be limited and a minimum number of illustrations used.

OPINIONS: fully documented (800 words or less), are welcome for publication at the discretion of the editor.

WORD COUNT: is based on the calculation of approximately 250 words typed, double-spaced on 8½ x 11 paper.

MANUSCRIPT REQUIREMENTS: submit three (3) copies (original and two copies) to the editor, Journal of the Canadian Dental Association, 1815 Alta Vista Drive, Ottawa, Ontario K1G 3Y6. All graphs, photographs, charts and tables must also be submitted in triplicate.

A covering letter and a summary of the submission must accompany each article. Abstracts will be translated into French. The full mailing address of the corresponding author must accompany each manuscript.

The editor reserves the right to edit manuscripts for stylistic consistency, clarity and conciseness. The corresponding author will receive a copy of the edited manuscript for checking prior to publication. Galley proofs will be forwarded to authors but changes other than correction of typographical errors will not be accepted. Authors will be given a 24-hour turn-around time. No exceptions will be made. Authors must list professional degrees, academic/hospital affiliations and appointments and are requested to submit a photograph of themselves for publication with the article.

NOTE: Manuscripts must be typed, double spaced on 8½ x 11 paper on one side of the page only. An abstract must accompany each manuscript.

ARTICLE TITLES: must be descriptive but concise and suitable for indexing. Lengthy titles are subject to editing.

LEGENDS: must be typed as a group on a separate page for all illustrations. Photomicrograph legends must specify magnification and stain.

REFERENCES: must be keyed to the text and numbered

consecutively. Journal references must give the author's name, article title, abbreviated journal name, volume number, first page number and last page number of article, year of publication:

1. Hechter, F.J. Symmetry and dental arch form of orthodontically treated patients. *JCDA* 44:173-184, 1978.

For books, give the author's name, book title, location and name of publisher, year of publication:

2. Kilpatrick, H.C. Work simplification in dentistry, ed. 2. Philadelphia, Saunders, 1964.

ILLUSTRATIONS: must be high quality and only professional-quality drawings, charts and graphs should accompany manuscripts. Color slides or negatives will not be accepted for publication. Radiographic films are not acceptable. Radiographs must be in the form of black and white glossy prints for successful reproduction. Color photographs will be published only on a limited basis and at the author's expense.

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PERMISSION AND WAIVERS: must accompany the manuscript. Waivers are mandatory for the publication of photographs of patients unless faces are masked to prevent identification. Waiver forms are available from the Journal of the Canadian Dental Association, Ottawa. Permission of the author and publisher must be obtained for use of previously published material quoted in the text and for use of previously published illustrations.

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Please direct all enquiries to: The Editor, Journal of the Canadian Dental Association.

Transpositional labial flap vestibuloplasty of the mandible

Allan C. Moon, DDS, MS
Toronto

ABSTRACT

Complete denture fabrication on the atrophic edentulous mandibular ridge has been a clinical problem, particularly with high muscle attachments and inadequate sulcus depth. The transpositional flap technique as advocated by Edlan has been performed on 14 patients, with excellent results. This technique enables the procedure to be performed on an out-patient basis, in the office with local anaesthesia and conscious sedation and eliminates the need for a graft. This procedure should be considered in geriatric patients who are not capable of tolerating extensive surgical procedures under general anaesthesia and who meet the requirements of the procedure as outlined in the article.

Atrophy of the mandible in complete denture wearers is a common problem. To fabricate a retentive and stable denture over an atrophic mandible with high muscle and soft tissue attachments and inadequate vestibular depth is a clinical challenge and may be extremely difficult. To overcome the problem, different surgical techniques have been developed to deepen the vestibular sulcus in order to provide an expanded denture base which will decrease pressure per square unit of bone and increase denture stability. The current vestibuloplasty techniques can be generally classified as secondary epithelization, skin grafting, mucosal grafting and transpositional flap technique. Sometimes more elaborate procedures such as bone grafting and osteotomy are necessary to adequately correct the problem.

The results from the transpositional flap technique originated by Edlan¹ have been very encouraging. This technique eliminates the need of a soft tissue graft and can be performed in the office with local anaesthesia and conscious sedation on an out-patient basis. The morbidity of the operation is low and the operating time is short compared to the other procedures. This procedure is particularly welcomed by those geriatric patients who suffer from chronic illness and may not be able to tolerate extensive procedures under general anaesthesia.

Pre-operative evaluation and requirements

1. The patient must be able to tolerate the procedure under local anaesthesia and conscious sedation (optional).
2. A radiographic survey is needed to screen for pathologic lesions in the jaw and the approximate location of mental foramina.
3. In order to gain the maximum benefit from the procedure, a minimum anterior alveolar bone height of about 15 mm as estimated from the radiograph, is necessary with a labial bony contour compatible with the placement of a lower denture.
4. The vestibule and lip mucosa must be healthy.

Surgical Technique

The patient is placed in a semi-reclining position. Intravenous conscious sedation is administered (optional). Bilateral mandibular, lingual and mental nerve blocks are achieved with local anaesthetic. The lower lip is then retracted outward gently. The desired additional vestibular mucosa can be estimated by pushing the vestibular mucosa with an examination mirror, inferiorly towards the border of the mandible (Figs. 1A and 1B). The amount of labial mucosa required is about one-and-a-half times the desired vestibular depth. This is marked with a scratch of the blade. The lower lip is then hyper-extended. The in-

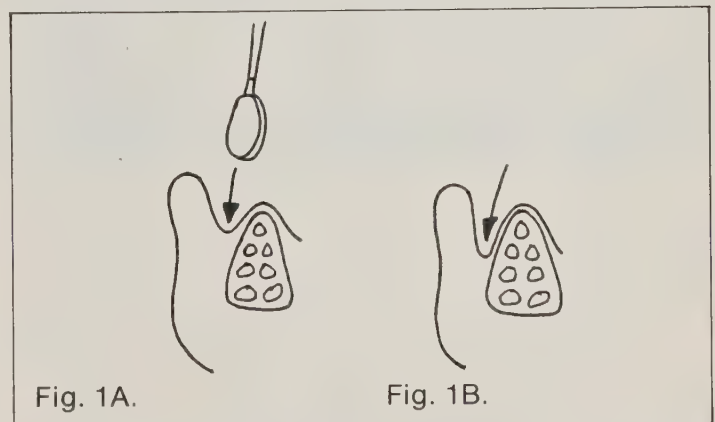


Fig. 1. The use of a dental mirror to estimate the extent of lip mucosa needed for the surgery.

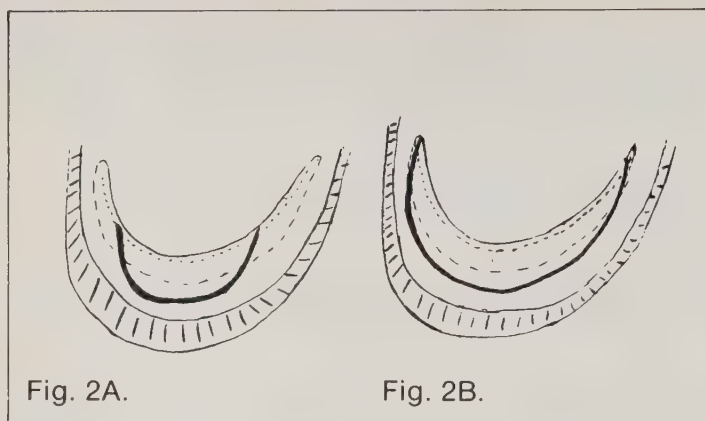


Fig. 2. A: The incision for anterior vestibuloplasty. B: The incision for the full mandibular vestibuloplasty.

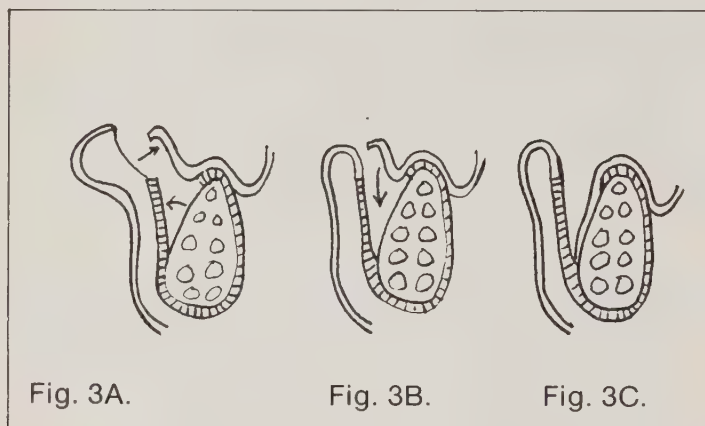


Fig. 3. A: The labial mucosal flap is elevated and the periosteum incised below the crest of the alveolar ridge and elevated to the desired depth of the new vestibule. B: The periosteum is sutured to the lip mucosa edge. C: The labial mucosal flap is then positioned to the depth of the new vestibule.

cision depends on the extension of the sulcus depth required in each individual case. If the extension of the sulcus depth was planned for the anterior region, a crescent-shaped mucosal incision is then marked, which extends toward the mental foramen region bilaterally. The line is flared laterally near the mental foramen and curved toward the alveolar crest. (Fig. 2A). If the extension is for the entire lower ridge, the crescent-shaped incision is then extended towards the retromolar region and curved towards the alveolar crest (Fig. 2B). Local anaesthetic with epinephrine (1:100,000) is then injected submucosally. This will "balloon" the mucosal tissue and facilitate a plane of dissection, and at the same time achieve hemostasis. A No. 15 blade is then used to make the incision just immediately through the mucosa. Blunt and sharp dissection is then carried out to develop a labial mucosal flap and extended towards the crest of the ridge. Peripheral attachment of the mental nerve, if encountered, is then freed gently. Atraumatic tissue pickup forcep is used, and meticulous dissection is necessary to prevent flap perforation. Minimum thickness of the labial mucosal flap without perforation is desired. Hemostasis is usually achieved

by local pressure with gauze sponge and only rarely is electrocoagulation needed.

With the mucosal flap retracted to the lingual side (Figs. 3A and 4B), the periosteum is incised immediately below the alveolar crest and a full mucoperiosteal flap is raised. The periosteum should be raised in one piece without perforation, and then elevated in an inferior direction to the desired level for the new vestibule. In order to maintain the mentolabial fold, the periosteum should not be reflected to the inferior border of the mandible in the midline. Bony irregularities can be trimmed and smoothed at this time. If the planned vestibuloplasty is posterior to the mental foramen, the mental nerve is then identified and carefully dissected free of the tissue attachment. Lowering of the mental nerves, if necessary, can be achieved at this time. After completion of this step, the periosteal flap margin is then sutured to the mucosal margin in the lip (Figs. 3B and 4C). Absorbable sutures are used in an interrupted fashion, starting at the midline. The mucosal flap is then placed directly upon the denuded bone and absorbable suture materials are then used to suture the mucosal flap as deeply as possible to the newly created vestibule without excess tension (Figs. 3C and 4D). When the mental nerve is encountered, the mucosal flap is repositioned over the nerve and carefully sutured around the nerve without damaging its integrity. This completes the transpositioning of the mucosa from the lip to the alveolar ridge and the periosteum to the lip. Thus, sometimes the procedure is called the "lip switch" technique.

After surgery, an external compressive dressing is placed to minimize edema and hematoma formation and to immobilize and support the lower lip (Fig. 4E). This is accomplished by painting tincture of benzoin on the chin and cheek. A one-inch strip of Elastoplast is placed gently across the mentolabial fold for two postoperative days. A narcotic analgesic and antibiotics are prescribed for post-operative pain control. The patient is then seen the day after surgery for irrigation of the surgical area with saline, and again the following day for removal of the pressure dressing and irrigation of the mouth; he is then seen weekly, for about four weeks. In most patients, healing is adequate at four weeks to have an impression taken for denture fabrication.

Figure 5 shows one of the cases with full extension of the labial flap bilaterally at the retromolar region.

RESULTS AND DISCUSSION

Fourteen patients have had the surgery performed on an out-patient basis, with intravenous sedation and local anaesthesia. Six patients had a complete extension of the vestibule from the retromolar region and eight had the vestibuloplasty at the anterior region. Bleeding was minimal except in one case where electrocoagulation was necessary to control haemorrhage. None reported severe pain during the postoperative period. Codeine 30 mg, every four to six hours, was adequate to control pain. There was

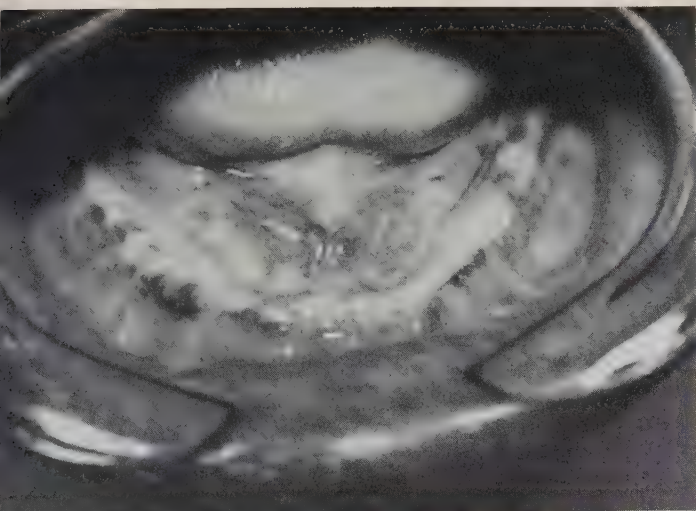
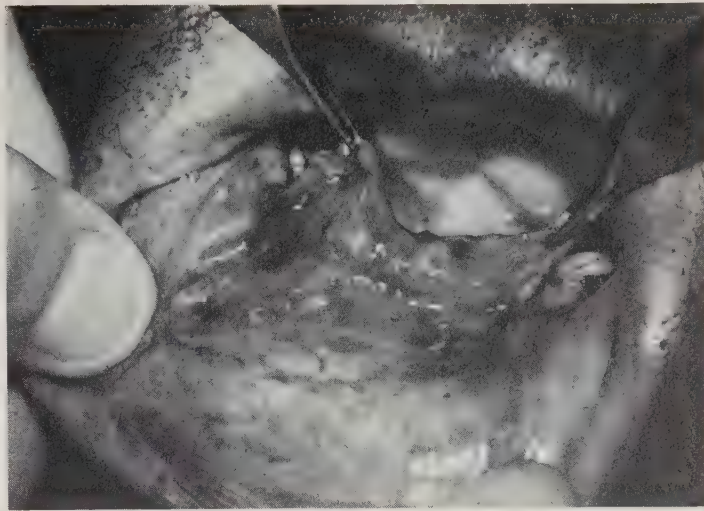
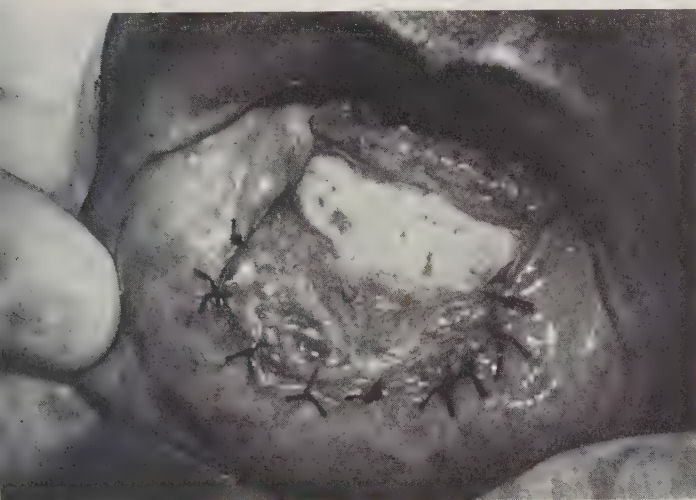


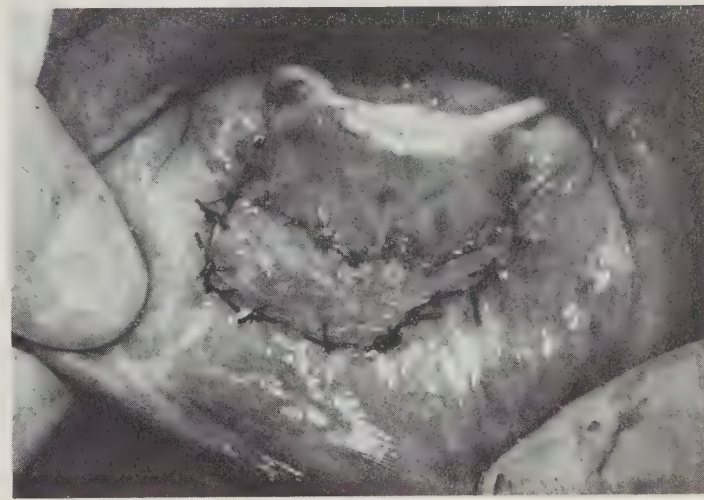
Fig. 4. A: Pre-operative mandibular ridge with high muscle attachments in the anterior region.



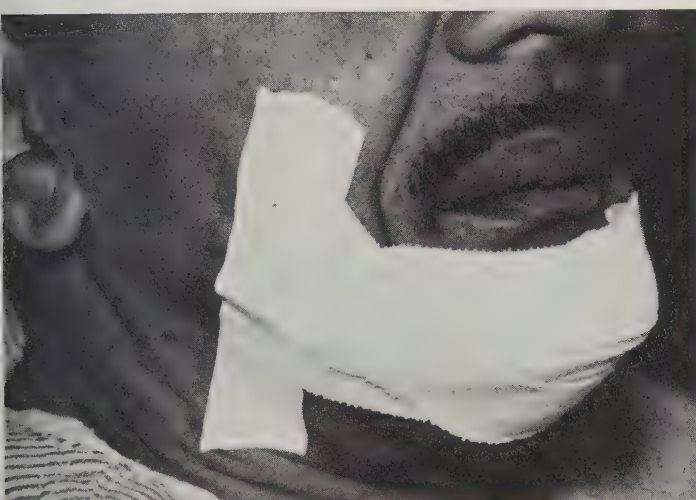
B: The mucosal flap is developed.



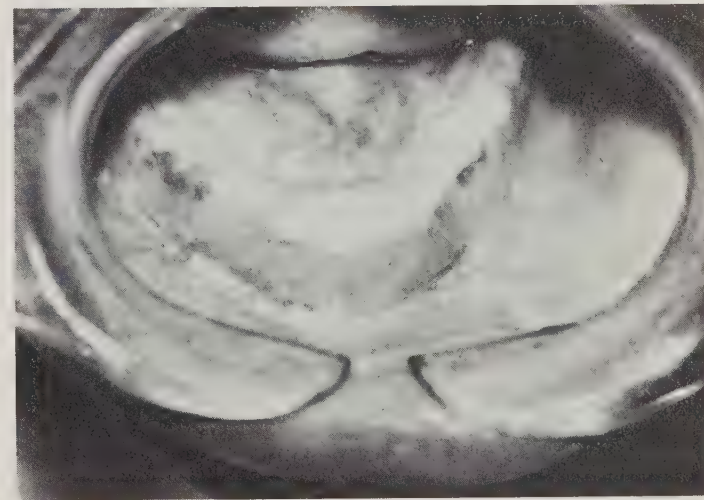
C: the periosteal flap is sutured to the mucosa margin of the lip.



D: The mucosal flap is sutured to the depth of the new vestibule.



E: Pressure dressing with Elastoplast.



F: Six weeks post-operatively.

infection in only one patient, who had put his old denture over the surgical area the day after operation and traumatized the wound edges. This infection was controlled with antibiotics and removal of the lower denture, with daily irrigation for about one week. If a patient has an existing lower denture, it is relined with tissue conditioner after three weeks of healing.

In one patient, there was a formation of hematoma under the mucosal flap (**Fig. 6**). The hematoma was drained by puncturing a series of small holes with a 16-gauge needle, and the old denture was relined and applied as a pressure dressing over the alveolar ridge. The hematoma resolved in two weeks without complication; in retrospect, its formation was a result of the mucosal flap

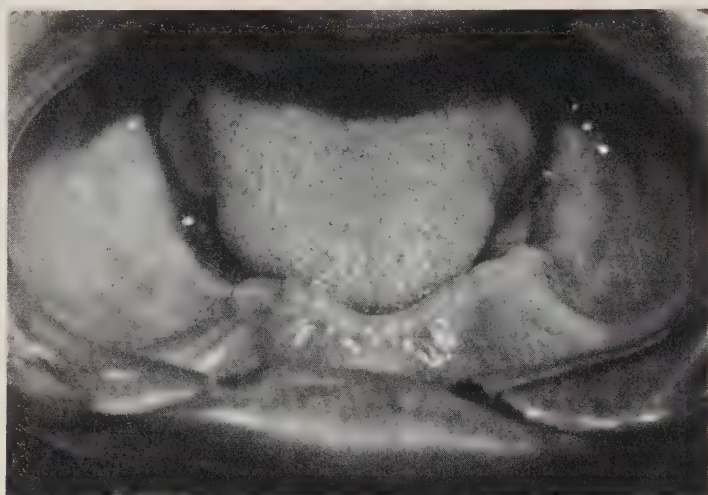
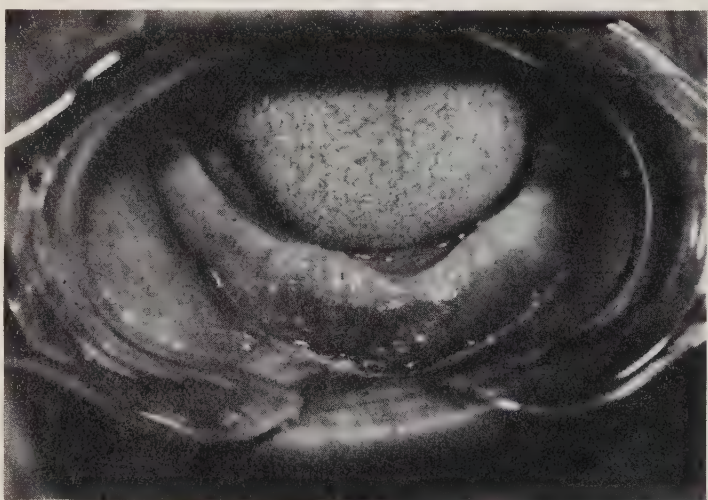
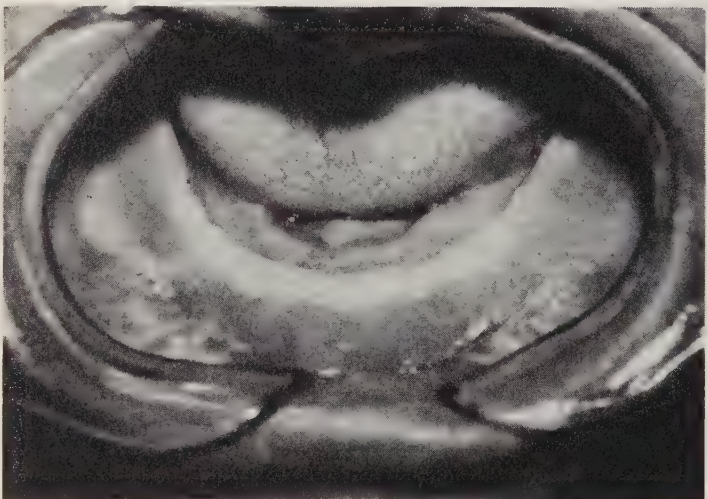


Fig. 5. A: Pre-operative mandibular ridge with high muscle attachments.



B: Four weeks post-operatively.



C: Eight weeks post-operatively.

being sutured too loosely to the depth of the new vestibule. This was due to the fact that the estimated width of the mucosal flap was slightly in excess of the actual sulcus depth, resulting in redundant tissue over the alveolar bone. This can easily be corrected at the time of surgery. The loose mucosal flap should first be placed over the denuded alveolar bone to the new vestibular depth and if there is excessive tissue, the margin of the mucosal flap



Fig. 6. Formation of hematoma under the mucosal flap.

trimmed to obtain the right depth of the vestibule. The mucosal flap is sutured in the usual manner without excessive tension. An alternate way of preventing hematoma formation is to reline the patient's denture and fix in-situ with circummandible sutures as described by Hopkins and Stafford.² Usually this is not necessary if the mucosal flap is well sutured and the estimated width of the flap is within reasonable limits.

The postoperative healing is very satisfactory. About four weeks after surgery, one can only barely distinguish the periosteum from the lip mucosa. The transposed attached mucosa overlying the alveolar ridge is normal in colour and shows a greater mobility than the attached gingiva on the alveolar crest. This is in agreement with Wessberg, Hill and Epker³ who reported an average of 50 per cent greater mobility in the transposed attached mucosa overlying the alveolus. The mobility of the mucosa overlying the alveolus ranges from 0.3 to 1.6 mm. Hillerup⁴ also reported a loosening of the mucosal flap after three months, and after one year all cases exhibited evidence of mobility. This seems to be directly related to the thickness of the mucosal flap.

Scarring at the lip mucosa and the periosteal margin has been minimal and almost unnoticeable. The suture line has some fibrosis after surgery which progressively decreases and is satisfactory after six months; this is consistent with cases reported by Wessberg, Hill and Epker.³

The stability of the vestibular depth is about 95 per cent after one year, and consistent with that reported by Wessberg, Hill and Epker.³ Kethley and Gamble⁵ reported an 80 per cent stability after two years and Hillerup⁶ also reported similar stability.

All the patients who have had the vestibular sulcus deepened near the premolar area had their dentures relieved at the mental foramen area to prevent pressure on the neurovascular bundle. They all expressed satisfaction and improvement in the stability and retention of their dentures after the operation. There is no noticeable inversion of the vermillion border of the lower lip or change in

chin appearance. Hillerup⁶ reported that the reduction of lip height and increase in mental protrusion are significant in patients with short lips and over-extension with detachments of all fibres of the mentalis muscle. Two patients experienced transient paresthesia of the lower lip and chin after the operation, which resolved within a two-month period. The patient's own assessment of the results have been very good. When asked if they would undergo the surgery again, about 80 per cent responded positively.

Hillerup⁶, in his study of the profile changes of bone and soft tissue following his procedure, reported that there is positive evidence of progressive labial and alveolar crest bone resorption after surgery, confined mainly to the extension of periosteal elevation. The range of bone resorption is 4 to 20 per cent, as reported by Hillerup. Wessberg, Hill and Epker³ also reported lateral alveolar bone resorption, ranging from 0 to 1.2 mm with an average of 0.4 mm, during the first three postoperative months. To minimize the vertical resorption, the periosteum should be incised just below the muco-gingival junction rather than at the crest of the alveolar ridge.

SUMMARY

Transpositional labial flap technique for deepening of the mandibular sulcus has been performed on 14 patients,

with satisfactory results. All patients felt an improvement of stability and retention of their dentures after operation. Scarring of the newly created sulcus depth has not been a problem and the depth is stable. New dentures can be fabricated four to six weeks after surgery. This procedure has been well accepted and tolerated by the patients treated.

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Données sur les caractéristiques personnelles et familiales et sur les pratiques d'hygiène dentaire en fonction de l'état dentaire

Diane Lachapelle-Harvey*, BSc, MSc
Québec, Canada

SUMMARY

The present investigation was carried out to describe the oral hygiene habits of a population of adolescents and also to study the interrelationship between oral hygiene, personal characteristics and oral status. Of the sample of 159 adolescents aged from 12 to 16, 79 were girls and 80 were boys. They were randomly chosen from seven high schools. One examiner, using mouth mirror, explorer, extra-oral light and four bite-wings films conducted the caries examination. Information on personal characteristics and on oral hygiene habits were obtained by questionnaires. More than half of the adolescents did not receive dental care on a regular basis. Oral hygiene was very poor, characterized by the use of a non-recommendable toothbrush, by the practice of an inadequate brushing technique and by the absence of dental floss. Most of the subjects used fluoride dentifrice, but only 5.4 per cent of the subjects used other forms of fluoride on a regular basis. The adolescents' dental status was reported in a previous publication.⁽¹²⁾

Correlation and multiple regression analyses revealed several significant relations between the personal characteristics, the oral hygiene habits and the dental caries and dental plaque indices. Among those variables, the most significant were the age of the subject, and the parents' educational level for the caries index; and the most significant variables for the dental plaque index, were the age and sex of the subject, the parents' educational level, the use of dental floss and the practice of an adequate tooth brushing technique. In this study, the need for dental educational programs for the adolescents and for the population in general has been demonstrated. These pro-

grams should aim at the practice of good oral hygiene habits and at the use of fluorides to help prevent dental decay.

Il est connu depuis plusieurs années que les microorganismes de la plaque dentaire jouent un rôle primordial dans l'étiologie des maladies dentaires.^(1,2) Axelsson et Lindhe⁽³⁾ prouvèrent dans leur étude, l'efficacité du contrôle de l'hygiène dentaire par une diminution remarquable du taux de caries et des maladies périodontaires. Plusieurs auteurs^(4,5,6,7,8,9,10) établirent chez les jeunes une relation entre les facteurs socio-économiques et/ou les pratiques d'hygiène dentaire et la carie dentaire. Richardson et ses collaborateurs⁽¹¹⁾ ont étudié la relation entre la carie dentaire et l'hygiène dentaire chez 457 enfants canadiens. Les analyses n'ont révélé aucune corrélation significative entre l'hygiène dentaire et le nombre de caries.

Afin d'apporter des connaissances supplémentaires sur le sujet, la présente étude a été élaborée en ayant les objectifs généraux suivants: décrire une population d'adolescents de la banlieue de Québec quant à ses caractéristiques personnelles et familiales, ses pratiques d'hygiène dentaire et son état dentaire*; dégager, parmi les observations nommées ci-haut, les facteurs pouvant le mieux prédire l'état dentaire de cette même population.

MÉTHODOLOGIE

L'échantillon était composé de 159 sujets dont 79 filles et 80 garçons, âgés de 12 à 17 ans, choisis au hasard dans sept écoles secondaires de Charlesbourg. La denture

* L'auteur est membre du Centre de recherches en nutrition de l'Université Laval

* L'état dentaire de la population a fait l'objet d'une publication antérieure⁽¹²⁾

Tableau 1

Répartition de la population selon l'âge, le sexe et le niveau scolaire

Age ¹	Nombre de sujets	Pourcentage
12 ans	14	8,8%
13 ans	50	31,4%
14 ans	50	31,4%
15 ans	35	22,0%
16 ans	9	5,7%
17 ans	1	0,6%

N: 159

¹ Moyenne d'âge $\pm$ écart-type; 13,9 ans $\pm$ 1,08

Sexe	Nombre de sujets	Pourcentage
masculin	80	50,3%
féminin	79	49,7%

N: 159

Niveau scolaire	Nombre de sujets	Pourcentage
Secondaire I	28	17,6%
Secondaire II	82	51,6%
Secondaire III	26	16,4%
Secondaire IV	23	14,5%

N: 159

a été examinée par un seul dentiste durant le mois d'avril et de mai 1978. On calcula l'indice CAO de Klein et Palmer⁽¹³⁾ et un indice de la plaque dentaire. De plus amples détails sur la méthodologie ont été donnés dans une publication antérieure.⁽¹²⁾ Après avoir reçu des instructions, les sujets de l'étude remplirent deux questionnaires portant sur les caractéristiques personnelles et familiales et sur les pratiques d'hygiène dentaire.

Tous les calculs qui ont servi à l'analyse des données, ont été faits à l'aide du programme S.P.S.S. (Nie et coll.⁽¹⁴⁾) au Centre de traitement de l'information de l'Université Laval. Des analyses statistiques descriptives (moyenne, écart-type, répartition de population) ont été effectuées pour les caractéristiques personnelles et familiales et pour les pratiques d'hygiène dentaire. Des analyses statistiques de relation (analyse de corrélation et de régression multiples par étapes) ont également été effectuées. Ainsi, des coefficients de corrélation ont été calculés afin de mesurer la relation linéaire entre l'indice CAO, l'indice de la plaque dentaire et les variables indépendantes. De plus, quatre analyses de régression multiple "par étapes" ont été calculées dans le but de produire une combinaison linéaire de variables indépendantes ayant une corrélation aussi forte que possible avec les deux variables dépendantes, soit l'indice CAO et l'indice de la plaque dentaire.

RÉSULTATS ET DISCUSSION

L'état dentaire⁽¹²⁾ est caractérisé par un indice CAO moyen de 12,81 et l'indice de la plaque dentaire démontre clairement un manque d'hygiène dentaire chez la majorité des sujets.

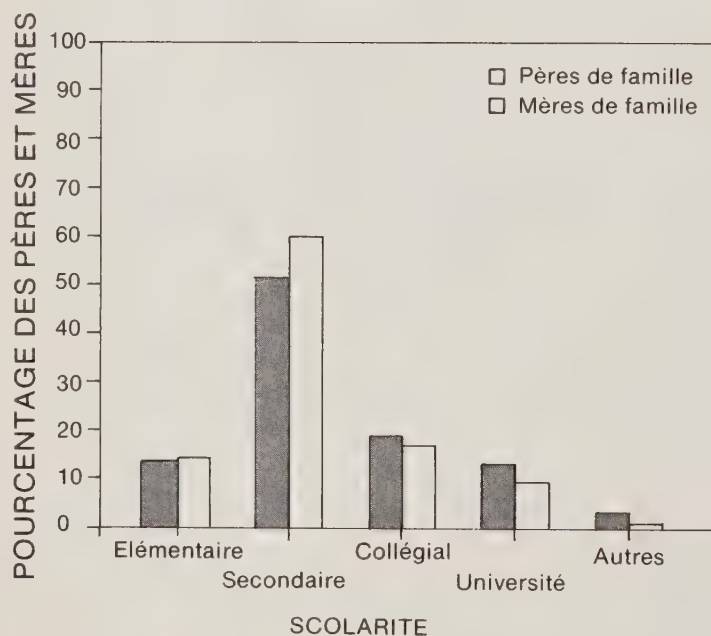


Fig. 1 — RÉPARTITION DES PÈRES ET DES MÈRES DE FAMILLE SELON LEUR NIVEAU SCOLAIRE

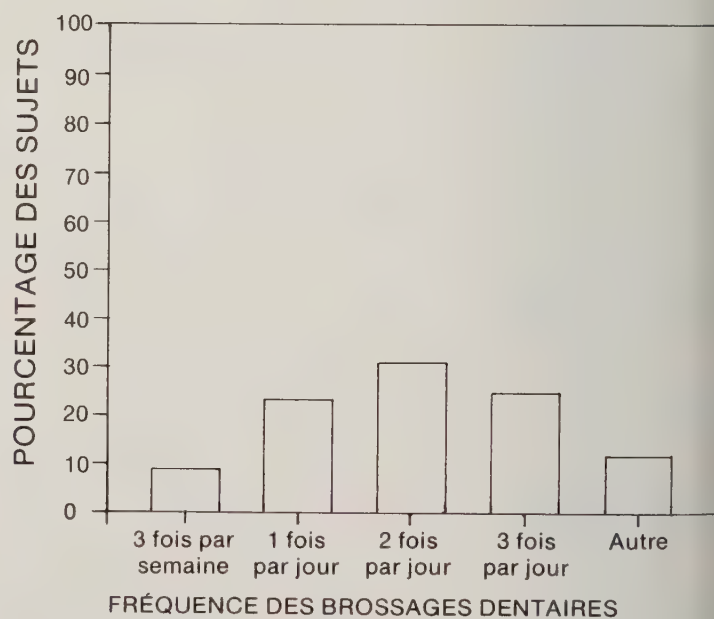


Fig. 2 — RÉPARTITION DE LA POPULATION SELON LA FRÉQUENCE DES BROSSAGES DENTAIRE

Caractéristiques personnelles et familiales des sujets

Le tableau 1 illustre les répartitions de la population selon l'âge, le sexe et le niveau scolaire. L'âge moyen des adolescents est de 13,9 ans, la moitié des 159 sujets sont de sexe féminin et 51,6 pour cent sont du niveau secondaire II. Le nombre d'enfants dans la famille est en moyenne de 3,3; 29,9 pour cent des familles comptent deux enfants et 31,8 pour cent comptent trois enfants. La répartition de la population selon le rang occupé dans la famille montre que 34,8 pour cent des sujets occupent le premier rang dans leur famille et 34,2 pour cent occupent le deuxième rang. Les pères ont en moyenne 43,7 ans et les mères 41,5 ans. La figure 1 illustre le niveau scolaire des parents. Plus de pères que de mères ont un niveau d'éducation post-secondaire, soit 35,0 pour cent comparativement à 26,1 pour cent. Par ailleurs, 51,3 pour cent des pères ont un niveau scolaire équivalent au secondaire alors que ce pourcentage s'élève à 59,9 chez les mères; 13,6 pour cent des pères ont un niveau scolaire équivalent au cours primaire et ce pourcentage s'élève à 14 pour cent chez les mères. Les sujets sont francophones et les lieux de résidence indiquent que les sujets de l'étude n'ont pas habité et n'habitent pas dans des municipalités où l'eau de consommation est fluorurée.

Pratiques d'hygiène dentaire

Les tableaux 2, 3 et 4 et les figures 2 et 3 présentent les répartitions de la population selon diverses pratiques d'hygiène dentaire, notamment le nettoyage des dents, l'utilisation de fluorures et les visites chez le dentiste. Le nombre de répondants est indiqué dans chaque cas. Selon la figure 2, 79,1 pour cent des sujets brossent leurs dents au moins une fois par jour; 24,7 pour cent le font trois fois par jour. Le pourcentage des adolescents qui ne brossent

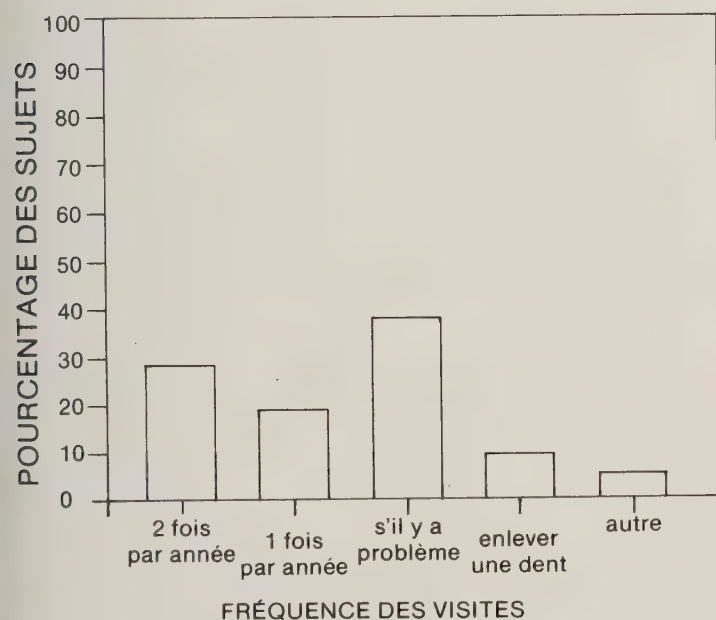


Fig. 3 — RÉPARTITION DE LA POPULATION SELON LA FRÉQUENCE DES VISITES CHEZ LE DENTISTE

pas leurs dents régulièrement ou qui ne les brossent pas du tout s'élève donc à 20,0 pour cent. Demirjian (18) nota que, selon les groupes, 21 à 24 pour cent des sujets de son étude ne brossaient pas leurs dents. Cependant, 25,9 pour cent seulement des sujets suivent une méthode adéquate de brossage qui devrait assurer le nettoyage de toutes les surfaces dentaires (voir tableau 2). De plus, 5,8 pour cent seulement des sujets utilisent une brosse à dents aux soies douces. Or, seul ce type de brosse à dents permet d'atteindre les régions cervicales, buccales ou linguales des dents et de bien nettoyer le sulcus sans traumatiser la gencive (Carranza (1979),⁽¹⁵⁾).

Tableau 2

Répartition de la population selon les pratiques d'hygiène dentaire

Usage d'une méthode systématique de brossage	Nombre de sujets	Pourcentage
oui	41	25,9%
non	117	74,1%

N: 158

Sorte de brosse à dents utilisée	Nombre de sujets	Pourcentage
soies douces	9	5,8%
soies moyennes	125	80,1%
soies dures	22	14,1%

N: 156

Tableau 3

Répartition de la population selon les pratiques d'hygiène dentaire

Utilisation de la soie dentaire	Nombre de sujets	Pourcentage
oui	47	29,7%
non	111	70,3%

N: 158

Fréquence d'utilisation de la soie dentaire	Nombre de sujets	Pourcentage
1 fois par jour	8	16,7%
3 fois par semaine	2	4,2%
2 fois par semaine	7	14,6%
à l'occasion	28	58,3%
autre	3	6,3%

N: 47

Tableau 4

Répartition de la population selon les pratiques d'hygiène dentaire

Usage passé ou actuel de fluorures systémiques	Nombre de sujets	Pourcentage
oui	6	4
non	144	96

N: 150

Formes de fluorures topiques utilisées	Nombre de sujets	Pourcentage
Rince-bouche fluoruré	0	—
Gomme à mâcher fluorurée	0	—
Application topique à la maison	0	—
Application topique chez le dentiste	2	1,4%
Pâte dentifrice fluorurée	136	85,5%
Aucune forme de fluorure	20	13,1%

N: 158

Ces résultats portent à croire qu'un très faible pourcentage des sujets brossent leurs dents d'une façon efficace. Quant à la soie dentaire, 29,7 pour cent des sujets l'utilisent, mais 16,7 pour cent seulement de ces derniers, soit 5,0 pour cent de l'échantillon total, le font une fois par jour (voir tableau 3). Le tableau 4 montre que six sujets seulement, soit 4,0 pour cent des répondants, prennent ou ont déjà pris des fluorures par voie systémique, sous forme de comprimés ou de gouttes. Par ailleurs, la très grande majorité des sujets, soit 85,5 pour cent emploient de la pâte dentifrice fluorurée, alors que deux sujets seulement, soit 1,4 pour cent de la population, disent avoir recours à une autre forme de fluorure topique; en l'occurrence, il s'agit d'applications de fluorure par le dentiste. Enfin, sur la figure 3, on voit qu'au total, 47,2 pour cent des sujets visitent régulièrement le dentiste, c'est-à-dire au moins une fois par année; 28,3 pour cent le font deux fois l'an. De plus, 37,7 pour cent disent aller chez le dentiste lorsqu'il y a un problème, et 9,4 pour cent n'y vont que pour faire enlever une dent, (selon la demande formulée par le patient), donc, lorsque les dommages sont la plupart du temps irréversibles. Les pratiques d'hygiène dentaire varient beaucoup selon les sujets de l'étude. D'une façon générale, l'usage d'une brosse à dents inadéquate entraîne un brossage incomplet. La fréquence des brossages varie beaucoup selon les sujets. L'usage de la soie dentaire n'est pas une pratique courante. La pâte dentifrice au fluorure s'avère la forme de fluorure la plus utilisée. Environ la moitié des sujets visitent le dentiste au moins une fois par année et les autres ne le visitent pas ou ne le visitent que lorsqu'il y a un problème ou pour faire enlever une dent.

Tableau 5

Résultats de l'analyse de régression multiple "par étapes" de l'indice CAO selon certaines caractéristiques personnelles et familiales†

Variables indépendantes	$r^{\ddagger}$	R^2 §	F	Degré de signification
Age du sujet	0,299	0,089	13,916	$P < 0,001$
Scolarité du père	-0,270	0,145	9,264	$P < 0,005$
Sexe du sujet	0,113	0,159	2,173	$P < 0,250$
Scolarité de la mère	-0,217	0,168	1,644	$P < 0,250$
Nombre d'enfants dans la famille	0,034	0,170	0,230	$P > 0,250$
Rang du sujet dans la famille	0,060	0,172	0,354	$P > 0,250$
Age du père	0,034	0,172	0,034	$P > 0,250$
Ensemble des variables retenues		0,172	4,037	$P < 0,050$

† N: 144

‡ Coefficient de corrélation simple.

§ Coefficient de corrélation multiple au carré. Ce coefficient exprime la proportion de la variance totale d'une variable dépendante (ici, l'indice CAO) expliquée par un ensemble de variables indépendantes.

Relation entre les caractéristiques personnelles et familiales, les pratiques d'hygiène dentaire et l'état dentaire

Quatre analyses de régression multiple "par étapes" ont été effectuées dans le but de déterminer dans quelle mesure les caractéristiques personnelles, familiales et dentaires observées, contribuent à expliquer la variance de l'indice CAO et de l'indice de la plaque dentaire des sujets de l'étude. La première de ces analyses de l'indice CAO (tableau 5) portait sur les caractéristiques personnelles et familiales obtenues par l'entremise de questionnaires. Cette analyse a montré que les plus importantes de ces variables sont l'âge du sujet ($P < 0,001$) et la scolarité du père ($P < 0,005$): dans les conditions de notre étude, elles expliquent 14,5 pour cent de la variance de l'indice CAO. Le sens de la corrélation entre l'indice CAO et la scolarité du père est négatif. Si l'on admet que la scolarité des parents est un indice du niveau socio-économique, ce résultat signifie que plus le niveau socio-économique est élevé, plus l'indice CAO est faible.

Aucune des autres variables, prise individuellement, n'ajoute une contribution significative à celle des deux premières. Cependant, les sept variables retenues dans cette analyse contribuent au total à expliquer 17,2 pour cent de la variance de l'indice CAO. La deuxième analyse de l'indice CAO portait sur les pratiques d'hygiène dentaire obtenues par l'entremise de questionnaires. Les résultats ne sont pas significatifs quant à la prédiction de l'indice CAO selon les pratiques de l'hygiène dentaire à un seuil de probabilité de 0,05 ($P = 0,05$). Les corrélations entre les caries et les mesures d'hygiène dentaire sont faibles dans cette analyse de régression multiple. Ripa⁽¹⁷⁾

Tableau 6

Résultats de l'analyse de régression multiple "par étapes" de l'indice de la plaque dentaire selon certaines caractéristiques personnelles et familiales†

Variables indépendantes	r [‡]	R ² [§]	F	Degré de signification
Sexe du sujet	-0,291	0,085	13,141	P < 0,001
Age du sujet	0,290	0,162	13,054	P < 0,001
Scolarité du père	-0,232	0,208	8,043	P < 0,005
Age du père	-0,075	0,218	1,800	P < 0,250
Age de la mère	0,172	0,232	2,462	P < 0,250
Rang du sujet dans la famille	0,033	0,233	0,196	P > 0,250
Nombre d'enfants dans la famille	0,088	0,237	0,760	P > 0,250
Scolarité de la mère	-0,186	0,237	0,090	P > 0,250
Ensemble des variables retenues		0,237	5,256	P < 0,050

N: 144
[†] Coefficient de corrélation simple.
[‡] Coefficient de corrélation multiple au carré. Ce coefficient exprime la proportion de la variance totale d'une variable dépendante (ici, l'indice de la plaque dentaire) expliquée par un ensemble de variables indépendantes.

a rapporté des résultats similaires dans une étude faite chez 384 enfants de 9 à 13 ans. Le manque de corrélation entre les mesures d'hygiène dentaire et l'indice CAO peut s'expliquer par le choix limité des questions destinées à mesurer les pratiques d'hygiène dentaire. Prenons en exemple la fréquence élevée des brossages dentaires qui peut ne pas correspondre à la mesure de l'efficacité de brossages dentaires.

Toutefois, il est intéressant de constater que dans le tableau des corrélations (tableaux 8 et 9), la fréquence* de l'utilisation de la soie dentaire a une corrélation positive avec l'indice CAO (le coefficient de corrélation est de 0,246) et l'indice CAO a une corrélation positive avec l'indice de la plaque (le coefficient de corrélation est de 0,227). Donc plus la plaque dentaire tend à être abondante, plus l'indice CAO s'élève. Or, comme la quantité de plaque dentaire est influencée par les habitudes d'hygiène dentaire, ces dernières ont une relation au moins indirecte avec l'incidence des caries.

Les tableaux 6 et 7 donnent les résultats de deux analyses de régression multiple de l'indice de la plaque dentaire selon les caractéristiques personnelles et familiales, et selon les pratiques d'hygiène dentaire. L'analyse du tableau 6 a montré que l'âge et le sexe du sujet, de même que la scolarité du père expliquent 20,8 pour cent de la variance de l'indice de la plaque (P < 0,005). Pour deux de ces variables, soit le sexe du sujet et la scolarité du père, la corrélation est négative. Lors de la compilation des données

Tableau 7

Résultats de l'analyse de régression multiple "par étapes" de l'indice de la plaque dentaire selon les pratiques d'hygiène dentaire††

Variables indépendantes	r [‡]	R ² [§]	F	Degré de signification
Utilisation de la soie dentaire	0,337	0,113	19,043	P < 0,001
Méthode systématique de brossage	0,226	0,141	4,707	P < 0,050
Emploi d'un dentifrice fluoruré	0,143	0,149	1,376	P > 0,250
Fréquence des visites chez le dentiste	0,174	0,156	1,254	P > 0,250
Sorte de brosse à dents employée	-0,120	0,160	0,776	P > 0,250
Fréquence des brossages dentaires	0,002	0,161	0,041	P > 0,250
Ensemble des variables retenues		0,161	4,592	P < 0,050

†† N: 151
[†] Coefficient de corrélation simple.
[§] Coefficient de corrélation multiple au carré. Ce coefficient exprime la proportion de la variance totale d'une variable dépendante (ici, l'indice de la plaque dentaire) expliquée par un ensemble de variables indépendantes.

Tableau 8

Coefficients de corrélation (r) entre l'indice CAO et certaines variables personnelles, familiales et dentaires

Variables†	r	Degré de signification [‡]	Nombre de sujets
Age	0,264	***	153
Scolarité du sujet	0,149	*	153
Scolarité du père	-0,270	***	148
Scolarité de la mère	-0,233	**	151
Fréquence et utilisation de la soie dentaire	-0,246	*	46
Indice de la plaque dentaire	0,227	**	152
Nombre de dents permanentes	-0,318	***	153
Nombre de dents cariées	0,666	***	149
Nombre de dents absentes	0,417	***	83
Nombre de dents obturées	0,559	***	115

† Seules les variables indépendantes dont le degré de signification de la corrélation avec l'indice CAO est égal ou inférieur à 0,05 (P < 0,05), ont été notées

‡ Le degré de signification est indiqué de la façon suivante:
P < 0,001 *** P ≤ 0,01 ** P ≤ 0,05 *

* La fréquence d'utilisation de la soie dentaire est décroissante dans la compilation des données, pour fins d'analyse.

Tableau 9

Coefficients de corrélation (r) entre l'indice de la plaque dentaire et certaines variables personnelles, familiales et dentaires

Variables†	r	Degré de‡ signification	Nombre de sujets
Age	0,274	***	153
Sexe	-0,273	***	153
Age de la mère	0,160	*	152
Scolarité du sujet	0,298	***	153
Scolarité du père	-0,239	**	148
Scolarité de la mère	-0,167	*	151
Méthode systématique de brossage	0,221	**	152
Utilisation de la soie dentaire	0,343	***	152
Emploi d'un dentifrice fluoruré	0,146	*	152
Fréquence des visites chez le dentiste	0,169	*	152
Nombre de dents permanentes	-0,192	**	152
Nombre de dents cariées	0,268	***	148
Nombre de dents obturées	-0,170	*	115
CAO	0,227	**	152

† Seules les variables indépendantes dont le degré de signification de la corrélation avec l'indice CAO est égal ou inférieur à 0,05 ($P < 0,05$) ont été notées.

‡ Le degré de signification est indiqué de la façon suivante:
 $P \leq 0,001$ *** $P \leq 0,01$ ** $P \leq 0,05$ *

relatives aux sexes, le chiffre 1 représentait le sexe masculin, et le chiffre 2, le sexe féminin; le sens négatif de la corrélation entre l'indice de la plaque dentaire et le sexe signifie donc que l'indice de la plaque dentaire a tendance à être plus élevé chez les garçons. Si on admet que la scolarité du père est un indice du niveau socio-économique, la corrélation négative entre l'indice de la plaque dentaire et la scolarité du père signifie que plus le niveau socio-économique est élevé, plus l'indice de la plaque dentaire est faible.

Aucune des autres variables prise individuellement n'ajoute une contribution significative à celle des trois premières variables. Cependant, les huit variables retenues dans cette analyse contribuent au total à expliquer 23,7 pour cent de la variance de l'indice de la plaque. L'analyse du tableau 7 a montré que l'utilisation de la soie dentaire et la pratique d'une méthode systématique de brossage expliquent 14,1 pour cent de la variance de l'indice de la plaque dentaire ($P \leq 0,05$). La corrélation de ces deux variables avec l'indice de la plaque dentaire est positive. La plaque dentaire a tendance à être plus élevée

chez les sujets qui n'utilisent pas la soie dentaire, et chez ceux qui n'ont pas une méthode de brossage adéquate. Les coefficients de corrélation simple de ces deux variables varient de 0,226 à 0,337. Tel que mentionné précédemment, les pratiques d'hygiène dentaire sont reliées à l'indice de la plaque dentaire, en ce qui concerne la soie dentaire et la méthode de brossage. Aucune des autres variables prise individuellement, n'ajoute une contribution significative à celle des deux premières. Cependant, les six variables retenues dans cette analyse contribuent au total à expliquer 16,1 pour cent de la variance de l'indice de la plaque dentaire.

Les tableaux présentant les analyses de régression multiple donnent plusieurs autres variables qui contribueraient à expliquer significativement l'indice CAO ou l'indice de la plaque dentaire, si elles étaient considérées séparément. Cependant, elles n'ajoutent pas une contribution significative à l'explication de la variance à cause de leurs interrelations avec les variables dégagées par l'analyse de régression multiple.

Coefficients de corrélation entre l'état dentaire et les caractéristiques personnelles, familiales et les pratiques d'hygiène dentaire

Les tableaux 8 et 9 présentent les coefficients de corrélation de l'indice CAO et de l'indice de la plaque dentaire. Dans ces tableaux, seules les variables indépendantes dont le degré de signification de la corrélation avec la variable dépendante est égal ou inférieur à 0,05 ($P < 0,05$), ont été notées. Les variables dont la corrélation est significative confirment généralement les résultats des analyses de régression multiple.

Les résultats démontrent que pour l'indice CAO, plus la scolarité des pères et des mères est élevée, plus l'indice CAO est bas; plus la fréquence d'utilisation de la soie dentaire est élevée, plus l'indice CAO est bas; plus l'indice de plaque dentaire est élevé, plus l'indice CAO est élevé.

Le tableau 9 indique que l'indice de la plaque dentaire a tendance à être plus élevé chez les garçons que chez les filles; plus la scolarité des pères et des mères est élevée, plus l'indice de la plaque dentaire est bas; plus l'âge du sujet augmente, plus l'indice de la plaque dentaire augmente: il faut noter que le nombre de dents permanentes ayant fait éruption augmente avec l'âge, donc un plus grand nombre de surfaces de dents doivent être nettoyées et comme les habitudes d'hygiène dentaire s'avèrent inefficaces, la plaque dentaire est alors présente sur presque toutes les surfaces. Plus la scolarité du sujet augmente, plus l'indice de la plaque dentaire est élevé: ceci n'est pas étonnant puisque le système scolaire actuel du niveau secondaire ne favorise et ne stimule pas de façon efficace la motivation des adolescents à l'acquisition de saines habitudes d'hygiène dentaire.

La pratique des bonnes habitudes d'hygiène dentaire diminuent l'indice de la plaque dentaire comme le démontrent les résultats concernant la méthode systématique de brossage, l'utilisation de la soie dentaire et l'emploi d'un

dentifrice fluoruré dont les coefficients de corrélation s'échelonnent de 0,146 à 0,343. Lors de la compilation des résultats, le chiffre 1 représentait l'affirmation de la pratique et le chiffre 2, la négation de la pratique: le sens positif des corrélations indique que plus on tend vers la négation de la pratique d'une méthode systématique de brossage ou de l'utilisation de la soie dentaire ou de l'emploi d'un dentifrice fluoruré, plus l'indice de la plaque dentaire est élevé. La fréquence des visites chez le dentiste indique que plus la fréquence est faible, plus l'indice de la plaque est élevé.

RÉSUMÉ:

La présente étude avait comme premier objectif général de décrire les caractéristiques personnelles et familiales, les pratiques d'hygiène dentaire et l'état dentaire d'adolescents de la banlieue de Québec. Le deuxième objectif général était de dégager, à partir des données descriptives, les facteurs pouvant le mieux prédire l'état dentaire de cette même population. L'échantillon était composé de 159 sujets (79 filles et 80 garçons) âgés de 12 à 17 ans et choisis au hasard dans sept écoles. La denture de chacun des sujets a été examinée par un seul dentiste avec l'aide d'un miroir buccal, d'un explorateur, en utilisant la lumière de l'unité dentaire et après avoir soigneusement asséché les dents avec l'air comprimé. De plus, quatre radiographies interproximales ont servi à diagnostiquer les caries. Les données sur les caractéristiques personnelles et familiales et sur les pratiques d'hygiène dentaire ont été recueillies par l'entremise de questionnaires.

La moyenne d'âge des adolescents de l'étude est de 13,9 ans. Ils occupent en moyenne le 2,3^{ème} rang dans leur famille qui est constituée, en moyenne, de 3,3 enfants. La majorité des pères et des mères de famille ont un niveau secondaire d'éducation. Plus de la moitié des adolescents ne reçoivent pas de soins dentaires régulièrement. Les pratiques d'hygiène dentaire sont très inefficaces. Elles sont caractérisées par l'usage généralisé d'une brosse à dents non recommandable, par une méthode de brossage inadéquate et par l'absence d'usage de la soie dentaire. Les lieux de résidence indiquent que les sujets de l'étude n'ont pas habité et n'habitent pas dans des municipalités où l'eau de consommation est fluorurée. Seulement six sujets, soit 4 pour cent des répondants, prennent ou ont déjà pris des fluorures par voie systémique, sous forme de comprimés ou de gouttes. Par ailleurs, la très grande majorité des sujets, soit 85,5 pour cent, emploient la pâte dentifrice fluorurée.

L'état dentaire est caractérisé par un indice CAO très élevé, soit en moyenne 12,8: il est parmi les plus élevés au monde. Des analyses de régression multiple de l'indice CAO et de l'indice de la plaque dentaire ont été effectuées selon les caractéristiques personnelles et familiales et selon les pratiques d'hygiène dentaire. Statistiquement, les va-

riables décrivant les caractéristiques personnelles et familiales qui influencent le plus l'indice CAO chez les sujets de l'étude sont l'âge du sujet et le niveau scolaire des parents; les variables décrivant les pratiques d'hygiène dentaire n'influencent pas significativement l'indice CAO; cependant, l'analyse de ces pratiques révèle qu'elles sont si généralement incomplètes et inefficaces pour l'ensemble des sujets qu'elles ne permettent aucune prédiction statistique.

Les variables décrivant les caractéristiques personnelles et familiales qui influencent le plus l'indice de la plaque dentaire sont l'âge et le sexe du sujet, l'âge et la scolarité des parents; les variables décrivant les pratiques d'hygiène dentaire qui prédisent l'indice de la plaque dentaire sont l'utilisation de la soie dentaire et la pratique d'une méthode de brossage efficace.

Ces résultats nous amènent à tirer les conclusions et à formuler les recommandations suivantes.

L'état dentaire est alarmant chez les sujets de l'étude. Les pratiques d'hygiène dentaire ne réussissent pas à désorganiser la plaque dentaire, de sorte que cette dernière est presque toujours présente sur les surfaces dentaires les plus vulnérables. De plus, la résistance des dents n'est pas améliorée par l'addition de fluorures dans l'eau de consommation dans la ville de Charlesbourg, ni par l'usage de comprimés de fluorures. De plus, l'utilisation très répandue de dentifrice fluoruré a peu d'effet puisque le brossage des dents n'atteint pas les surfaces les plus vulnérables.

Puisque l'usage de fluorures systémiques n'est pas courant, les autorités concernées devraient mettre l'accent sur ces moyens d'améliorer la résistance de l'émail à la carie dentaire dès le plus jeune âge, par l'usage de fluorures dont l'effet est systémique, tels que la fluoruration des eaux de consommation ou* par l'usage de comprimés de fluorures. De plus, cette résistance devrait être accrue par l'usage supplémentaire de fluorure dont l'effet est topique tels que l'usage de pâte dentifrice fluorurée de concert avec une méthode de brossage adéquate, les applications de fluorure au cabinet dentaire, l'usage de rince-bouche fluoruré, etc.

D'après les résultats obtenus concernant les pratiques d'hygiène dentaire, les instructions d'hygiène dentaire s'adressant aux adolescents devraient mettre en relief l'importance de l'utilisation d'une brosse à dents dont les soies sont molles, la démonstration d'une méthode de brossage efficace et de l'utilisation du fil de soie dentaire. Puisque les résultats indiquent que l'indice de la plaque dentaire a tendance à être plus élevé chez les garçons de l'étude, une attention particulière devrait leur être accordée.

Les résultats (voir figure 3) indiquent que moins de la moitié des sujets visitent le dentiste annuellement. Pourtant, tous les sujets de l'étude étaient très

* Les deux moyens sont mutuellement exclusifs, c'est-à-dire qu'ils ne doivent pas être combinés ensemble.

disposés à subir un examen dentaire et à recevoir une prophylaxie. Ils étaient très avides de connaître ce qu'était la plaque dentaire, ses effets et les moyens de l'éliminer. Il serait donc de première importance de susciter chez les jeunes la motivation d'acquiescer et de conserver une excellente santé dentaire. Cette motivation n'est pas, de toute évidence, suscitée par le milieu familial chez plus de la moitié des sujets tel que le démontre la figure 3 illustrant la fréquence des visites au dentiste.

Il serait souhaitable que le milieu scolaire appuie les professionnels dentaires en ayant des actions positives pour sensibiliser les adolescents aux bienfaits de l'acquisition et de la conservation d'une bonne santé dentaire. Cette motivation aux bonnes habitudes d'hygiène dentaire devrait être suscitée tout au long de l'année scolaire par l'établissement de politiques globales concernant la santé en général et la santé dentaire.

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Announcements

CANADA

October/octobre

The Fourth Biennial Symposium on Occlusal Studies, Hyatt Regency Hotel, Vancouver, British Columbia, October 17-20, 1982. Contact: The Society for Occlusal Studies, 1729 South Douglas Road, Anaheim, California 92806, U.S.A. or The Director, Division of Continuing Dental Education, 2199 Wesbrook Mall, U.B.C., Vancouver, B.C. V6T 1Z7.

The Ottawa Dental Society presents "Paedodontics" by Arlington Dungy of the Children's Hospital of Eastern Ontario, Norman Patterson Auditorium, Ottawa Civic Hospital, Ottawa, October 18, 1982, from 1-5pm.

The Annual Meeting of the Canadian Academy of Endodontics, Four Seasons Hotel, Montreal, Quebec, October 22-24, 1982. Contact: Dr. Herb Borsuk, 4141 Sherbrooke St. W., Suite 515 Westmount, Que. H3Z 1B8. Phone: (514) 933-8424.

November/novembre

The Ottawa Dental Society presents "Anaesthesia" by Dr. J. Mel Hawkins of Willowdale, Talisman Motor Hotel, Ottawa, November 15, 1982, from 9am to 5pm. Staff are invited to the morning session.

December/décembre

The Canadian Myo-Tronics Research Society presents the Neuromuscular Occlusion Seminar, Stage I, Airport Inn, Vancouver, B.C., December 3-4, 1982 with Dr. Dayton D. Krajicek, Director of Education, Myo-Tronics Research, Seattle, Washington. Contact: Myo-Tronics Research Inc., P.O. Box 2352, Drayton Valley, Alberta T0E 0M0.

The Toronto Academy of Dentistry Annual Winter Clinic, Royal York Hotel, Toronto, Ontario, December 6, 1982. Contact: Academy of Dentistry, 234 St. George St., Toronto, Ont. M5R 2P2. Phone: (416) 967-5649. **Please note change of day and date from previous years.**

Conference on Medical Device Technology in the 80's, Harbour Castle Hotel, Toronto, Ontario, December 6-8, 1982. Contact: Canadian Association of Manufacturers of Medical Devices, 480 Garyray Drive, Weston, Ont. M9L 1P8. Phone: (416) 745-9210.

International

October/octobre

The 39th Annual Meeting of The American Institute of Oral Biology, Palm Springs, California, October 29 to November 2, 1982. Contact: Executive Secretary, P.O. Box 481, South Laguna, California 92677.

November/novembre

Israel Dental Association's International Meeting, Tel-Aviv, Israel, November, 1982. Contact: Israel Government Tourist Office, 102 Bloor Street West, Toronto, Ontario M5S 1M8; (416) 964-3784.

Consensus Development Conference on Clinical Applications of Biomaterials, National Institutes of Health, Bethesda, Maryland, November 1-3, 1982. Contact: John W. Boretos, Building 13, Room 3W13, National Institutes of Health, Bethesda, Maryland 20205.

The American Academy of Implant Dentistry's 31st Annual Educational program IMPLANT UPDATE, Las Vegas, Nevada, November 1-6, 1982. Contact: AAID Central Office, 515 Washington Street, P.O. Box 2, Abington, Massachusetts 02351. Phone: (617) 878-7990.

"A Colloquium on Dental History, Writing for the Scientific Literature, and Bioethics" is the subject at the Annual Meeting of the American Academy of the History of Dentistry, Las Vegas Hilton International Hotel, Las Vegas, Nevada, November 5, 1982. Contact: University of Southern California School of Dentistry, P.O. Box 77951, 925 West 34th Street, Los Angeles, California 90007.

The 123rd Annual Session of the American Dental Association, Las Vegas, Nevada, November 6-9, 1982. Contact: ADA Council on International Relations, 211 East Chicago Avenue, Chicago, Illinois 60611. Phone: (312) 440-2726.

The 1982 Formal Continuing Education Clinic Program will be held at the 36th International Education Congress of Dental Technology, Sheraton Centre, New York City, N.Y., November 18-20, 1982. For further information, contact: IECDT, Suite 507, 1500 Broadway, New York, N.Y. 10036, or call Arthur D. Wilde, Executive Director, at (212) 730-0580.

International Congress of the Association Dentaire Francaise, Palais des Congres, Paris, France, November 23-27, 1982. Examining the two main aspects of pro-

fessional activity — Preventive Dentistry & Therapeutic Care. Simultaneous interpretation in English, French and German will be available during the main scheduled events. Contact: Dr. Guy Roberts, Secretary-General, 92 avenue de Wagram, 75017 Paris, France.

British Dental Association — Metropolitan Branch, First International Prosthodontic Symposium, Royal Lancaster Hotel, London, England, November 25-27, 1982. Contact: Dr. M. Seymour, Programme Co-ordinator, 22 Devonshire Place, London W1N 1PD, England.

December/décembre

The Sri Lanka Dental Association's 50th Anniversary, Colombo, December 4-6, 1982. Contact: Dr. L.S.W. Dassanayake, Chairman, Organising Committee, Sri Lanka Dental Association, Professional Centre, 275/5, Baudhaloka Mawartha, Colombo 7, Sri Lanka.

The Barbados Dental Association's 2nd Convention for The Caribbean Atlantic Regional Dental Association in conjunction with the Institute for Further Education, Barbados, W.I., December 5-8, 1982. Contact: Dr. Bernard Tuckman, 720 North Park Ave., Easton, Connecticut 06612, U.S.A.

The 37th Indian Dental Conference, Bangalore, India, December 26-29, 1982. Contact: Dr. Pradip Jayna, Hon. General Secretary, M-75, Connaught Circus, New Delhi-110001, India.

1983+

Eighth Annual Yankee Dental Congress, Sheraton-Boston Hotel, Boston, January 13-16, 1983. Presented by the Massachusetts Dental Society, the Congress is the sixth largest dental meeting in the U.S. Contact: Massachusetts Dental Society, 36 Washington Street, Wellesley Hills, MA 02181.

The 13th Annual Miami Winter Meeting, sponsored by the East Coast District Dental Society (FL), Fontainebleau Hilton, Miami Beach, Florida, January 20-22, 1983. Contact: East Coast District Dental Society, 420 South Dixie Highway, 2-E, Coral Gables, Florida 33146. Phone: (305) 667-3647.

The "Kieferorthopadische Fortbildungstagung in Kitzbuhel" meeting, Kitzbuhel/Tyrol, Austria, January 30- February 5, 1983. Contact: Medizinische Ausstellungs- und Werbegesellschaft, Maria Rodler & Co., A-1014 Wien I, Freyung 6, Postfach 155.

The 118th Midwinter Meeting of the Chicago Dental Society, Conrad Hilton Hotel, Chicago, Illinois, February 20-23, 1983. Contact: Chicago Dental Society, 30 North Michigan Avenue, Chicago, Illinois 60602, or phone: (312) 726-4076.

Joint Meeting of the ODS, ODN&AA, and Hygienists will be held in Ottawa, February 21, 1983. Table clinics, commercial exhibits and films will be held. The theme is "Debugging your Dental Office."

9th Congress of Dentistry for Children, Wenworth Melbourne Hotel, Australia, February 21-24, 1983. Contact: Dr. Roger K. Hall, Royal Children's Hospital, Parkville, 3052, Victoria, Australia.

Virgin Islands Dental Association Convention, February 27 to March 5, 1983. This year's theme is "Nutrition, Awareness, and Future Focus", and speakers include Drs. Cheraskin, Ken Olsen, Robert Goepf and Harold Slavkin. Limited to 300 registrants. For information contact: Dr. R. Brandon, 85 Lonsdale Drive, London, Ontario N6G 1T4.

The International Congress of Oral Implantologists Annual Meeting and Scientific Sessions, Beverly Hilton Hotel, Beverly Hills, CA, March 11-13, 1983. Contact: Mr. Clifford J. Kirschner, Executive Director, The International Congress of Oral Implantologists, P.O. Box 2277, Grand Central Station, New York, N.Y. 10163, (201) 783-6300.

International Conference of Dental Surgeons, Rawalpindi/Islamabad, Pakistan, March 22-26, 1983. Contact: Chairman, Organizing Committee, Armed Forces Institute of Dentistry, Rawalpindi, Pakistan.

A Periodontal Symposium, presented by the **Ottawa Dental Society**, will be held at the Talisman Motor Hotel, Ottawa, March 28, 1983, from 9am to 5pm. Speakers are Drs. Myron Poplove, Richard Yamaoka, James MacDonald, Jean-Marc Vincent, André Marcil, Dan Morrow, John Morrow, John Whyte and Bruce Squires.

1st International Congress of Medical Law and Ethics in Dentistry, Tel-Aviv, Israel, April 11-15, 1983. Contact: Israel Government Tourist Office, 102 Bloor Street West, Toronto, Ontario M5S 1M8; (416) 964-3784.

The Ottawa Dental Society presents "Predictable Restorative Procedures" by Dr. Alvin Fillastre of the L.D. Pankey Institute, Florida, Talisman Motor Hotel, Ottawa, April 18, 1983, from 9am to 5pm. The meeting will be followed by dinner, a general business meeting and elections for ODS members.

International Symposium on Biomechanical Aspects of Prosthodontics, presented by Professor George Zarb, Chairman of Graduate and Undergraduate Prosthodontics, Faculty of Dentistry, University of Toronto, and sponsored by The Hebrew University-Hadassah Faculty of Dental Medicine and the Toronto Alumni Chapter of the Alpha Omega Fraternity, Jerusalem, April 20-21, 1983. Contact: Professor J. Pietrovski, Director of Removable Prosthodontics, Department of Oral Rehabilitation, The Hebrew University-Hadassah Faculty of Dental Medicine, P.O.B. 12000, Jerusalem, Israel; or Dr. Hart Levin, Co-Chairman, 2006 Bathurst Street, Toronto, Canada M5P 3L1, (416) 781-2751.

9th Annual Meeting of The Society for Biomaterials and 15th International Biomaterials Symposium, Birmingham Hilton, Birmingham, Alabama, April 27 to May 1, 1983. Contact: Society for Biomaterials, c/o Dr. Robert G. Craig, Department of Dental Materials, School of Dentistry, University of Michigan, Ann Arbor, Michigan 48109.

First International Symposium on Periodontics and Restorative Dentistry, Sheraton-Boston Hotel, Boston, Massachusetts, April 28-30, 1983. Contact: Kim Vander Steen, Quintessence Publishing Co., Inc., 8 S. Michigan Avenue, Suite 2301, Chicago, Illinois 60603. Phone: (312) 782-3221.

The North Central region, in conjunction with the Northeastern region of the American Academy of Dental Group Practice, will hold its 1983 annual meeting in Canada, Westin Hotel, Toronto, Ont., May 13-15, 1983. Contact: American Academy of Dental Group Practice, Ms. Joann Junkins, Executive Secretary, 1709 Elka Lane, Madison, Wisconsin 53704, Phone: (608) 241-2609.

Ontario Dental Association 116th Annual Spring Meeting, The Sheraton Centre, Toronto, Ontario, May 15-18, 1983. Contact: Mrs. W.C. Durham, 234 St. George Street, Toronto, Ontario M5R 2P1.

"Medic Canada '83... Towards the Year 2000", a major international health care/medical devices conference and exhibition, Edmonton, Alberta, May 29-31, 1983. Contact: Robert S. First, Inc., 707 Westchester Avenue, White Plains, N.Y. 10604; (914) 949-4248.

The 1983 Annual Convention of Les Journées Dentaires du Québec, Montréal, Québec, May 28-June 1, 1983. Contact: Dr. Morton Lang, Executive Director, Les Journées Dentaires du Québec, 3565 rue Berri, Suite 200, Montréal, Québec H2L 4G3. Phone: (514) 842-9112.

The Canadian Association of Oral and Maxillofacial Surgeons Meeting, Vancouver, British Columbia, June 3-6, 1983. Contact: Dr. Brian M. Abrams, Secretary, Canadian Association of Oral & Maxillofacial Surgeons, 410 - 11012 MacLeod St.S., Calgary, Alta. T2J 6A5.

The next meeting of the American Dental Society of Europe will be held at the St. Pierre Park Hotel, Guernsey from June 28 to July 1, 1983. All enquiries should be made to: Brian J. Parkins, Hon. Secretary, 57 Portland Place, London WIN 3AH England.

The 5th Canadian Congress of Dentistry for Children, Westin Hotel, Calgary, Alberta, July 1-3, 1983. Contact: Dr. Jack A. Derbyshire, 496-115-9th Avenue S.E., Calgary, Alberta T2G 0P5. Phone: (403) 262-7000.

6th Dentistry International Congress, Rio de Janeiro, Brazil, July 16-21, 1983. For further information contact: A.B.O. — Rio de Janeiro, Ave. 13 de Maio — S/1001/6, CEP. 20.031, Rio de Janeiro, RJ, Brazil.

Meeting of the Canadian Academy of Prosthodontics, Vancouver, B.C., September 20-22, 1983. Contact: Dr. B.M. Jackson, 22 Water Street S., Kitchener, Ontario N2G 4K4.

Canadian Dental Association, 1983 National Convention, Vancouver, British Columbia, September 25-28, 1983.

Fédération Dentaire Internationale, 71st Annual World Dental Congress, Tokyo, Japan, November 14-20, 1983. Contact: Japan Dental Association, 1-20, Kudan-Kita 4-chome, Chiyoda-ku, Tokyo 102, Japan.

Canadian Dental Association, 1984 National Convention, Montreal, Quebec, April 8-12, 1984. Contact: Dr. Morton Lang, O.D.Q., 3565 Berri St., Suite 200, Montreal, Que. H2L 4G3. Phone: (514) 842-9112.

The 1984 Annual Convention of Les Journées Dentaires du Québec, Montréal, Québec, April 8-12, 1984. The convention will be held jointly with the Canadian Dental Association convention.

4th World Congress of Pain, sponsored by the International Association for the Study of Pain, Seattle, Washington, USA, August 31 to September 5, 1984. For information contact: Louisa Jones, Executive Secretary, IASP, 1309 Summit Avenue, Room 101, Seattle, Washington 98101 USA. Phone: (206) 292-7521.

Canadian Dental Association, 1985 National Convention, Ottawa, Ontario, September 29-October 2, 1985.

Offices and Practices

BRITISH COLUMBIA — For sale: Well established, busy, preventive practice. Two, modern-equipped, restorative plus hygiene operators. Situated in professional building. Located in Southern B.C. fruit growing area offering hunting, fishing, skiing, etc. Reasonably priced \$93,500. Reply to CDA Box Number 2080.

BRITISH COLUMBIA — Gold River. High gross, high potential practice for sale. Modern four operator office (three operators equipped). This practice serves a population of over 4,000. Originally established as a satellite practice. Contact: Dr. S. Miller, 500 Nimpkish Drive, P.O. Box 910, Gold River, B.C. V0P 1G0 or phone: (604) 283-7422.

SOUTHERN BRITISH COLUMBIA — Nelson. Diversified four-year-old family practice with preventive, holistic approach in small University town amid beautiful mountain lake scenery. Emphasis on relaxed, informal atmosphere in handcrafted, artistically designed modern office with reasonable overhead. Excellent opportunity for caring, experienced dentist to take over in Fall 1982. For further information and reasonable terms call (604) 352-5012.

BRITISH COLUMBIA — Powell River. Excellent opportunity to purchase a modern established practice in an area destined for progressive growth. Office is situated in a major shopping centre and has three operator offices, two of which are equipped with equipment less than three years old. Powell River is an attractive area with an ideal climate. Help in financing available if necessary. Contact: Dr. P. Martin, phone (604) 485-6286.

ALBERTA — Crossfield. Opportunity to establish practice in an expanding small town 30km from Calgary. Space available in new Professional building, air conditioned, moderate rental. Unparalleled recreational facilities. Close to Rocky Mountains. Hospital privileges can be obtained. If interested, phone or write Dr. H.C. Renney MD, Box 473, Crossfield, Alberta. Phone: (403) 946-5051 (office) or (403) 946-5170 (home, after 6 pm).

ALBERTA — Pincher Creek. Practice for sale. Owner wishes to return to school. Opportunity for one or two dentists. Any combination of practice, building, equipment etc. offered. Very reasonable terms. Phone: (403) 627-3290.

ONTARIO — Mississauga. Excellent location 20 minutes from downtown Toronto. 1,600 sq. ft. of dental office space available for sub lease in professional building in prime location. Seven modern operator offices wired and plumbed with built in cabinetry. For further information call: (416) 279-3364.

ONTARIO — Mississauga — Excellent location. Twenty minutes from downtown Toronto. 975 square feet of dental office space available in professional building in prime location. For further information call (416) 275-8501 or (416) 279-3364.

Associateship Available

NORTHWEST TERRITORIES — An opportunity for associateship exists in an extremely pleasant and modern dental clinic in Yellowknife, Northwest Territories. A very high standard of dental work demanded with emphasis on prevention, patient teaching, and motivation. Pleasant surroundings with new modern equipment. Write or phone to Drs. H.A. Bati, H.M. Adam, Cameron Dental Clinic, Box 1025, Yellowknife, N.W.T. X1A 2P5, (403) 920-2225.

NORTHWEST TERRITORIES — Inuvik. Associate required to join practice in Inuvik, N.W.T. Starting date September or October, 1982. Extensive travel throughout Central Arctic. Enquiries to Dr. J.W. Tennant, Box 1570, Hay River, N.W.T. X0E 0R0.

BRITISH COLUMBIA — We are looking for an associate to join our busy family practice in picturesque Revelstoke, British Columbia. Our established group offers a unique opportunity to practise high quality dentistry in a low stress environment. For information please call collect (604) 837-5149.

BRITISH COLUMBIA — Associate required for busy family practice in Lillooet from mid-August. Modern office in pleasant surroundings located 330 km. from Vancouver on Fraser River. For further details contact: Dr.

Barry R. Goldberg, Box 188, Lillooet, B.C. V0K 1V0 or phone collect (604) 256-4614 (office) or 256-7162 (home).

ALBERTA — Associateship available with an established Dental Group in Alberta. For more information write to: #301 — 5015 — 50th Avenue, Camrose, Alberta T4V 3P7, or phone: (403) 672-9672.

ALBERTA — Associate required for a preventive restorative practice in a community of 10,000 located 40 miles south of Edmonton. Future opportunity to become partner if compatible. For information phone: (403) 352-5076 (office), (403) 352-5407 (residence).

ALBERTA — West Edmonton Mall, Edmonton. North America's largest shopping mall. Full time and part time positions available in busy group type practice. Superb working conditions in large modern office. Percentage split with a \$50,000 guaranteed salary. Further details contact 519-434-7755 (London), or CDA Box Number 2123.

MANITOBA — Wonderful opportunity for two dentists to associate in a thriving practice with satellite. Located in Dauphin, population 9-10,000; area 75,000. Financially rewarding position with bookings two months ahead. Prevention oriented practice. Picturesque community, many lakes nearby. Recreation opportunities well-balanced physically and culturally. Shares available after one year to compatible persons. Phone Dr. Watson collect: (204) 638-4853 or 638-9312.

MANITOBA — Associateship available from October 1, 1982 in busy general practice, 15 miles from Winnipeg. New graduate welcome. All branches of dentistry practised and hospital privileges available. Call: (204) 467-5521 or write: Stonewall Dental Centre, Box 2000, Stonewall, Manitoba R0C 2Z0.

Ontario — Associateship leading to partnership available in busy Northern Ontario group practice. Progressive atmosphere, excellent opportunity for recent grad or '83 grad. Please reply to CDA Box Number 2126.

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ONTARIO — Hamilton. Percentage split with a \$50,000 guaranteed salary. Full time position available in busy patient-oriented practice. Excellent working environment within a 1 million square shopping mall. Further information 519-434-7755 (London), or CDA Box Number 2122.

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Opportunities Available

BRITISH COLUMBIA — Excellent opportunity in general group practice located on Central Vancouver Island, in outstanding fishing, skiing, recreation area. Reply to CDA Box Number 2121.

THE UNIVERSITY OF ALBERTA — Oral Radiologist. Applications are invited for a full-time permanent position in the Faculty of Dentistry for Chairman of the Division of Radiology. Candidates must have a dental degree and postgraduate or graduate education in Oral Radiology, and should have experience in Oral Diagnosis and/or a General Practice Residency. Rank and salary are commensurate with education and experience of an Associate Professor (\$35,420-\$51,658) or Professor (minimum of \$46,010). Applicants should be eligible for licensure in the Province. The University of Alberta is an equal opportunity employer but, in accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. All inquiries should be forwarded by November 30, 1982 to: Dr. C.G. Baker, Chairman, Department of Stomatology, The University of Alberta, Edmonton, Alberta, Canada T6G 2N8; (403) 432-2403.

UNIVERSITY OF SASKATCHEWAN — College of Dentistry. Effective July 1, 1983 a vacancy will exist for a full-time faculty member in the Divisions of Operative Dentistry and Biomaterials Sciences, Department of Restorative and Prosthetic Dentistry, College of Dentistry, University of Saskatchewan. Graduate qualification at the Masters level in a related discipline and/or teaching and practice experience in restorative dentistry preferred. Duties include teaching preclinical and clinical operative dentistry, co-ordinating teaching and research in dental materials science, and applied research and publication related to clinical disciplines. Consulting and practice privileges to a maximum of two half days per week are permitted, either on or off base. An Intramural Practice Unit is provided for faculty who wish to utilize on base facilities. Salary and rank commensurate with qualifications and experience. Interested applicants should send curriculum vitae and related documentation with at least three names for reference purposes to: Dean E.R. Ambrose, College of Dentistry, University of Saskatchewan, SASKATOON, Saskatchewan S7N 0W0.

ONTARIO — OTTAWA. Applications are invited for salaried position as a Clinical Dentist. Clinics are for low-income and welfare patients. Bilingualism an asset although unilingual English will be considered. Salary range \$43,473 — \$47,821 plus generous fringe benefits. Please submit qualifications and curriculum vitae to the Director of Administration and Personnel, OTTAWA-CARLETON REGIONAL HEALTH UNIT, 1827 Woodward Drive, Ottawa, Ontario K2C 0R5.

QUÉBEC — Montréal. Centre dentaire, centre-ville ouest, chaises disponibles quelques jours par semaine. Répondez au Dr Claude Vachon, 1464, Crescent, Montréal H3G 2B6. Tél: (514) 849-7774.

Equipment

EQUIPMENT WANTED — Amalgam Condenser Inserts for Dentsply Cavitron. Contact: Dr. David M. Lampert, Suite 202, Library Building, 2141 Jane Street, Downsview, Ontario M3M 1A2, or phone: (416) 244-7741.

Miscellaneous

Ontario — Toronto. For sale — Dental Laboratory. Metropolitan Toronto, large, modern, well equipped, and established, excellent sales. Only serious offers considered. Reply to CDA Box Number 2127.

INTERNATIONAL SYMPOSIUM ON BIOMECHANICAL ASPECTS OF PROSTHODONTICS

The Hebrew University-Hadassah Faculty of Dental Medicine, founded by the Alpha Omega Fraternity, in conjunction with the Toronto Alumni Chapter of the Alpha Omega Fraternity, wishes to announce the International Symposium on: "Biomechanical Aspects of Prosthodontics" presented by Professor George Zarb, Chairman of Graduate and Undergraduate Prosthodontics, Faculty of Dentistry, University of Toronto, Canada, to be held in Jerusalem, April 20, 21, 1983.

Practitioners interested in registration and additional information, please contact Professor J. Pietrokovski, Director of Removable Prosthodontics, Department of Oral Rehabilitation, The Hebrew University-Hadassah Faculty of Dental Medicine, P.O.B. 12000, Jerusalem, Israel — or to Dr. Hart Levin, Co-Chairman, 2006 Bathurst Street, Toronto, Canada M5P 3L1, Tel.: (416) 781-2751.

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BULLETIN

The federal government's proposed tax on employers' contribution to employees' dental care insurance plans has been dropped.

The announcement was made in the Statement on the Economic Outlook and Financial Position of the Government of Canada by Finance Minister Marc Lalonde on Wednesday, October 27.

This and the private health plans premium tax were among the few aspects of the government's November 12, 1981 tax proposals to be completely withdrawn.

The Canadian Dental Association is particularly proud and grateful for the support it received from dentists across Canada, who wrote letters and made telephone calls to their MPs, supporting the CDA lobby against the proposed insurance premium tax.

For background information, see the story "CDA continues lobby against insurance premium tax", on Page 690 of this edition of the Journal. This explains the points made in CDA's submission to the House of Commons standing committee on finance, trade and economic affairs, on September 22, by CDA Past-President, Dr. Donald E. Williams.

Some of the alterations to other proposals of the November 12, 1981 and the June 28 budgets are of interest to dentists and practice management companies.

Dentists, doctors, lawyers, accountants, veterinarians and chiropractors may continue to deduct expenses incurred for work-in-progress, even if the associated income is not realized until the following year.

The increase in unemployment insurance premiums will represent the most obvious cost factor for dentists as employers and their staff members, as employees.

As of January 1, premiums will rise from \$1.65 to \$2.30 weekly for employees and from \$2.31 to \$3.22 for employers, per \$100 of insurable earnings.

The pre-November 12 rules on tax treatment of capital gains in corporate reorganizations will continue to apply after the end of this year, subject to a continuing review.

The government will not implement a November 12, 1981 proposal to restrict the deduction of investment interest expense to the amount of the individual's taxable investment income in that year.

BULLETIN

Le gouvernement fédéral vient de renoncer à une mesure visant à taxer les régimes d'assurance dentaire que les employeurs défraient à l'intention de leurs employés.

La nouvelle a été annoncée par le Ministre des Finances, Marc Lalonde, mercredi, le 27 octobre dernier, dans un bulletin économique publié par le gouvernement du Canada.

Cette mesure ainsi que celle qui visait à taxer les régimes d'assurance-maladie privés font partie des propositions du budget fédéral de novembre 1981 qui ont été complètement rejetées.

L'Association dentaire canadienne est particulièrement fière et remercie les dentistes du Canada qui lui ont témoigné leur appui soit en écrivant à leur député, soit en lui téléphonant, afin d'exercer des pressions de concert avec l'ADC pour renverser une proposition aussi arbitraire que nuisible.

Pour plus de renseignements, on lira l'article publié page 712 de ce numéro et portant sur les pressions que l'ADC a exercées pour empêcher que les régimes d'assurance dentaire soient taxés. Cet article donne les raisons évoquées par le président sortant de l'ADC, le Dr Donald E. Williams, dans le mémoire présenté au Comité permanent des Finances, du commerce et des questions économiques à la Chambre des Communes.

D'autres modifications fiscales proposées dans les budgets du 12 novembre 1981 et du 28 juin 1982 intéressent les dentistes et les sociétés de gestion professionnelle.

Les dentistes, les médecins, les avocats, les comptables, les vétérinaires et les chiropraticiens peuvent continuer à déduire les dépenses effectuées pour le travail en cours, même si les revenus qui y sont associés ne seront pas touchés avant l'année suivante.

L'augmentation des primes de l'assurance-chômage entraînera très certainement pour les dentistes, comme employeurs, et pour les membres de leur personnel, comme employés, une dépense accrue.

A compter du 1^{er} janvier prochain, les primes augmenteront de 1,65\$ à 2,30\$ par semaine pour les employés et de 2,31\$ à 3,22\$ pour les employeurs pour chaque 100\$ de gain assurable.

Le règlement prévalant avant le 12 novembre 1981 et touchant l'imposition des gains en capital dans les restructurations des sociétés, continuera à s'appliquer après la fin de cette année, mais sera soumis à une révision continue.

Le gouvernement ne mettra pas en vigueur une proposition du 12 novembre 1981 visant à restreindre la déduction des intérêts débiteurs des placements du montant du revenu de placement d'un contribuable pour cette année.

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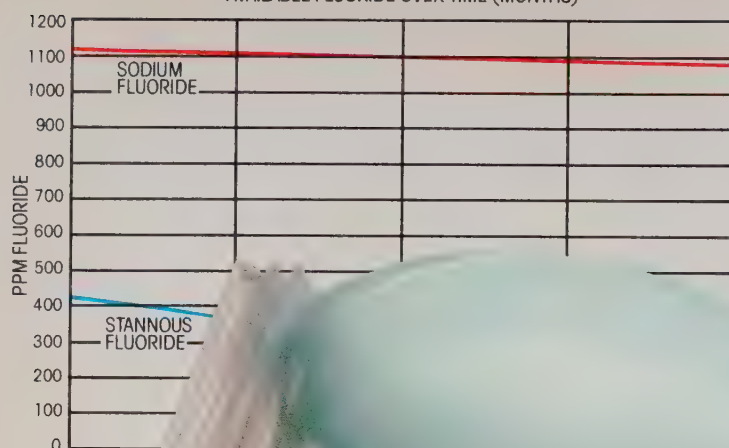
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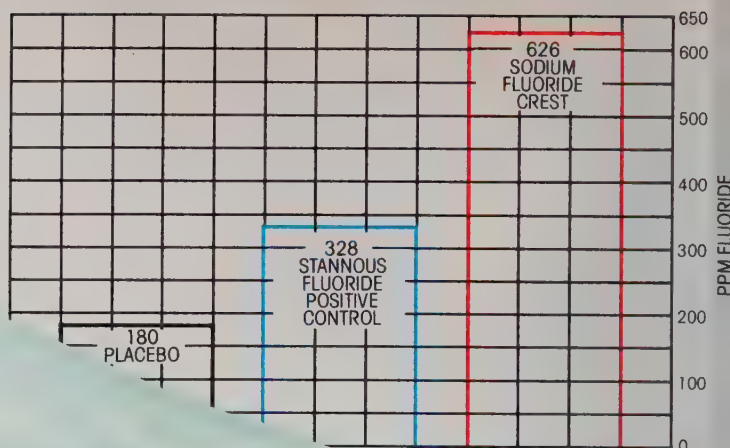
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Editorial

- 683** Dr. Donald E. Williams, as chairman of CDA's membership committee, advises dentists across Canada that the national organization deserves wider support.

Letters to editor

- 689** Dr. Clyde Covit warns that recent circumstances could erode standards established by the dental profession.

In the News

- 690** **CDA continues lobby against insurance premium tax**
A CDA submission was made to the House of Commons standing committee on finance, trade and economic affairs on Sept. 22.

- 691** **Manitoba extends dental coverage for children**
Coverage under the province's Dental Health Services Act has been extended for children born in 1969.

- 692** **Saskatchewan Adolescent Dental Plan is extended**
The Plan has been extended to include about 75 per cent of the 16-year-olds.
Violin playing- a pain in the jaw
A dentist-violinist says violin playing can create TMJ problems.

- 697** **Dr. William Thompson installed as CDA president**
Military pomp and pageantry were observed as Dr. William R. Thompson was installed as CDA president on Sept. 24.

- 699** **Dr. Robert Hicks becomes president-elect**
Dr. Robert Hicks of West Vancouver was elected as president-elect of CDA at the annual Board of Governors meeting in Ottawa on Sept. 25.

- 702** **Fluoride shortage has become acute in Canada**
The fluoride shortage, earlier believed to be only of a temporary nature, has now become acute in Canada.

- 704** **Briefly**
Dental news items from across Canada and around the world are highlighted.

CDA Resource Centre

- 709** Articles on Anaesthesia in Dentistry and other new acquisitions in the CDA Resource Centre/Library are listed.

Clinical

- 721** **Dentist-to-population ratios in Saskatchewan: a realistic appraisal.**
— R.E. McDermott et al

Publications

- 725** **Dental Technology: Theory and Practice**
"The book is richly illustrated with pictures and drawings. It emphasizes the important aspect of communication between dentist and technicians."
— Dr. Daniel Gau.

- 725** **Handbook of Clinical Endodontics**
"The book is well written, meets the author's objectives and is highly recommended for both students and practitioners."
— Barry H. Korzen DDS.

- 726** **Oral and Maxillofacial Surgery (Volume 1)**
"There are so many different topics discussed which are essential to the practice of oral maxillofacial surgery, that the book can easily be used as a splendid reference book."
— John M. Armitage DDS, FRCD(C)

Scientific

- 727** **Nasolabial cyst: report of a case**
— B. Azaz et al.
- 731** **Indications for removal of the mandibular impacted third molar**
— Richard Smith et al.
- 735** **Correction of maxillary mid-face deformity and mandibular excess**
— D.S. Precious et al.

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installedDentist ratios in
Saskatchewan

Oral Pathology

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Éditorial

- 684** En tant que président du Comité de recrutement de l'ADC, le Dr Donald E. Williams fait appel à tous les dentistes du Canada, leur rappelant que leur organisation nationale mérite un appui plus considérable.

Actualités

- 712** L'ADC poursuit sa lutte contre l'impôt sur les primes d'assurance dentaire
Le 22 septembre dernier, l'ADC a présenté un mémoire au Comité permanent des affaires financières, commerciales et économiques de la chambre des Communes.
- 713** Le Manitoba élargit son régime pour enfants
La Loi sur les services de santé-dentaire du Manitoba a été modifiée de manière à offrir une plus grande protection aux enfants nés en 1969.
- 713** Élargissement du régime d'assurance dentaire pour adolescents en Saskatchewan
Le régime a été élargi de manière à couvrir 75 pour cent des adolescents de 16 ans.
- 714** Investiture du Dr William Thompson comme président de l'ADC
Tout l'appareil de la pompe et de l'éclat militaires est déployé lors de l'investiture du Dr William Thompson comme président de l'ADC.
- 716** Le Dr Robert Hicks est élu président-désigné
Le 25 septembre dernier, lors de l'assemblée annuelle du Conseil d'administration à Ottawa, le Dr. Robert Hicks de Vancouver Ouest, a été élu président désigné de l'ADC.

- 718** En bref
Un tour d'horizon des principales informations dentaires dans le monde.

- 716** REER
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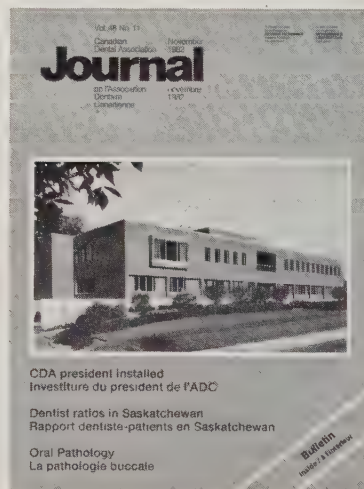
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NATIONAL ORGANIZATION MERITS WIDER SUPPORT

There are so many valid reasons why every dentist in Canada should support a strong national association that a brief editorial in this Journal can hardly do justice to the topic. However, I would ask you to seriously consider a few of those reasons.

The Canadian Dental Association provides many services for all dentists. These include a forum for exchange of information between the provinces and affiliated national organizations, conducting the accreditation program for dental schools, representing YOU before the federal government on many issues, meeting with other national professional associations, and making possible the insurance and investment programs available to all dentists. Much of this work is accomplished on YOUR behalf by many volunteer dentists who give freely of their time and expertise.

CDA is the forum for a constant and exhaustive flow of information on everything that affects dentists and their practices, such as legislation, tariff and taxation changes. The CDA liaises with many affiliated groups, for example, the National Dental Examining Board, the Association of Canadian Faculties of Dentistry, specialty groups, presidents and chief executive officers of the provincial associations and the Canadian Dental Hygienists' Association.

CDA's most important responsibility is the accreditation of dental school programs. This ensures every dentist in Canada that he has received an education which meets high national standards. How could this process be conducted from the provincial level?

Representing the dentists of Canada in meetings with the federal government has become a major activity of the CDA, and with a good measure of success. In the taxation field, you now enjoy a 100 per cent writeoff on continuing education. For anyone active in this field, this tax credit alone should more than pay your annual CDA dues. We also present your views to such bodies as the Health Protection Branch, Medical Services Branch, the Senate and the opposition parties of the federal government. This extremely important activity involves your officers and staff on an almost daily basis.

The CDA meets regularly with the Canadian Life and

Health Insurance Association, which represents almost 60 dental health insurance carriers. Liaison with this group has helped evolve the uniform regulations and standard claim forms which provide easy office administration of claims.

We have good communication with the Canadian Medical Association, the Canadian Bar Association and the Canadian Institute of Chartered Accountants. We have a joint committee with these latter groups, which is now preparing a major paper to government, concerning the enhancement of RRSPs. This committee was directly responsible for the successful lobby on continuing education and the lowering of the corporate tax from 50 to 33 1/3 per cent. CDA also meets with organizations such as the Canadian Council on Hospital Accreditation, the Canadian Standards Association and the Canadian Pharmaceutical Association.

Has your provincial association the time to do all these things and also carry out its present responsibilities?

Internationally, we meet on a regular basis with the officers of the American Dental Association and we also have contact with the Fédération Dentaire Internationale, the World Health Organization and the International Standards Organization.

The Canadian Dental Services Plan's insurance and investment programs are available to any dentist joining either his provincial or national association. However, try to get the favorable rates you enjoy with only provincial participation. CDSPI works so well because it is a national and not just a provincial entity.

There is no free lunch! For those dentists in the voluntary provinces who would not join CDA, I remind you that fellow dentists from Newfoundland to British Columbia, including Canadian Dental Association members in your province, pay more than their fair share of dues to the CDA to provide the services mentioned, and many more, from which you benefit.

Wouldn't you rather pay your own way?

*Dr. Donald E. Williams
Chairman: Membership Committee
Canadian Dental Association.*

VOTRE ORGANISATION MÉRITE UN PLUS GRAND APPUI

Le bref éditorial de ce journal peut difficilement couvrir toutes les bonnes raisons qu'un dentiste a pour appuyer une forte association nationale. Cependant, je vous invite à examiner sérieusement quelques-unes de ces raisons.

L'Association dentaire canadienne rend plusieurs services à tous les dentistes. Elle constitue une tribune qui permet aux provinces et aux organisations nationales affiliées d'échanger des informations, se charge d'agréer les programmes des écoles, VOUS représente auprès du gouvernement fédéral pour de nombreuses questions, rencontre d'autres associations professionnelles nationales et rend possible divers régimes d'assurance et de placements. Par ailleurs, ce travail est, en grande partie, fait EN VOTRE NOM par plusieurs dentistes bénévoles qui ne comptent ni leur temps ni leurs services d'experts-conseils.

L'ADC est une tribune où s'échangent sans arrêt des renseignements complets sur tout ce qui intéresse les dentistes et leurs pratiques, tels les lois, les tarifs douaniers et les nouveaux impôts. L'ADC entretient des rapports avec plusieurs groupes affiliés comme, par exemple, le Bureau national d'examen dentaire du Canada, l'Association des Facultés dentaires du Canada, les groupes de spécialistes, les présidents et les directeurs administratifs des associations provinciales, et l'Association canadienne des hygiénistes dentaires.

La principale responsabilité de l'ADC est l'agrément des programmes d'enseignement dans les écoles dentaires. Le but de l'agrément est d'assurer que chaque dentiste canadien reçoit une formation répondant à des normes nationales élevées. Que vaudrait l'agrément au niveau provincial?

De plus en plus, l'ADC s'occupe de représenter les dentistes du pays auprès du gouvernement fédéral, ce qu'elle fait avec assez de succès. Ainsi, touchant les impôts, vous bénéficiez maintenant d'un rabattement fiscal de 100 pour cent en éducation permanente. Quiconque se prévaut de cet avantage fait plus que récupérer ses frais de cotisation annuels à l'ADC. Par ailleurs, l'association se charge de faire connaître votre point de vue à divers organismes comme la Direction générale de la Protection de la santé, celle des Services médicaux, le Sénat et les partis de l'opposition au gouvernement fédéral. Cette représentation est extrêmement importante et exige une attention presque quotidienne de la part des responsables de l'ADC.

En outre, l'ADC se réunit régulièrement avec l'Association canadienne des compagnies d'assurance-personne

qui représente environ 60 compagnies d'assurance dentaire. De ces rencontres provient la mise au point du règlement et du formulaire de réclamation normalisé qui facilitent les procédures administratives touchant les réclamations.

De plus, l'ADC entretient de bons rapports avec l'Association médicale canadienne, l'Association du barreau canadien et l'Institut canadien des comptables agréés. Un comité mixte a été créé avec ces différentes organisations, lequel est en train de préparer un mémoire important à l'intention du gouvernement en vue d'améliorer les REER. C'est ce comité qui a obtenu les rabattements fiscaux consentis pour l'éducation permanente ainsi que la diminution de l'impôt pour les sociétés de gestion dans une proportion de 50 à 33 1/3 pour cent. L'ADC rencontre également d'autres organisations comme le Conseil canadien de l'agrément des hôpitaux, l'Association canadienne de normalisation et l'Association pharmaceutique canadienne.

Votre association provinciale a-t-elle le temps d'entretenir tous ces rapports et de veiller en même temps à ces propres responsabilités?

Sur le plan international, l'ADC rencontre régulièrement des représentants de l'Association dentaire américaine et des agents de la Fédération dentaire internationale. Elle communique aussi avec l'Organisation mondiale de la santé et l'Organisation internationale de normalisation.

Enfin, les régimes d'assurance et de placements des CDSPI sont disponibles pour tout dentiste qui se joint à son association provinciale ou à l'Association dentaire canadienne. Toutefois, essayez d'obtenir des taux aussi avantageux avec votre association provinciale seulement. Si les CDSPI sont si profitables, c'est parce qu'il s'agit d'un organisme qui opère sur le plan national et non seulement au niveau des provinces.

Rien n'est gratuit. Je veux rappeler aux dentistes qui, dans les provinces où l'adhésion à l'ADC est libre, ne veulent pas s'y joindre, que tous les dentistes du pays, de Terre-Neuve à la Colombie-Britannique, qui sont membres de leur association provinciale ou de l'Association dentaire canadienne, paient plus que leur part des frais afin que l'ADC fournisse les services énumérés ci-dessus et plus encore. Vous profitez de ces services.

Ne voulez-vous pas, vous aussi, acquitter votre part?

*Le président du Comité de recrutement de
l'Association dentaire canadienne,
le Dr Donald E. Williams*

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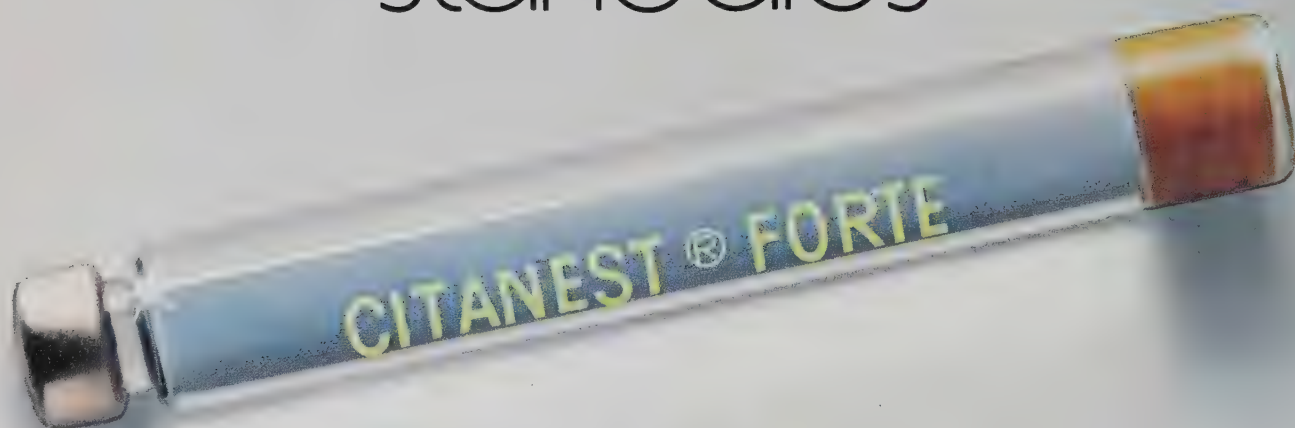
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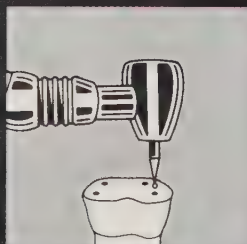
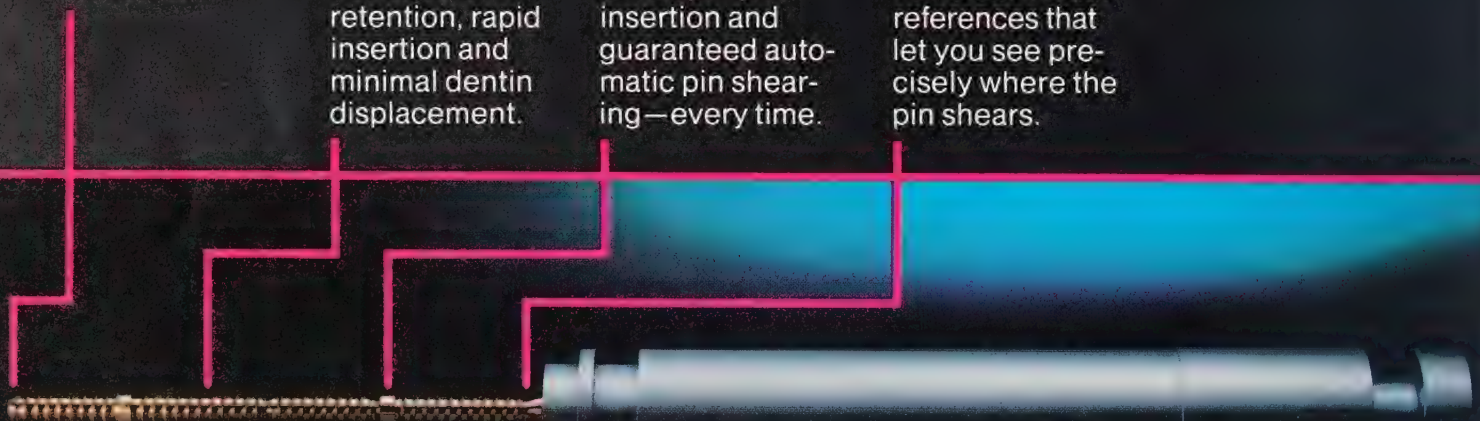
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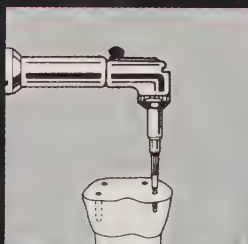
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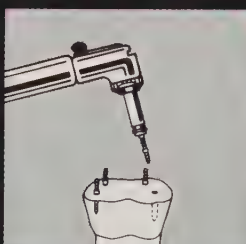
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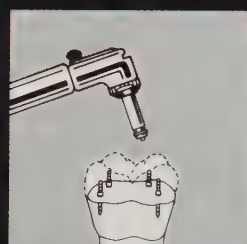
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Erosion of standards

It is interesting to note that the Canadian Dental Association disbanded a Subcommittee on Dental Systems based on the premise that the Ontario Dental Association has prepared an excellent thesis entitled, "The Changing Dental Profession: New Directions for Practice in the 80's and Beyond," as it fulfills the undertaking of the subcommittee.

In order to monitor the situation the CDA has, however, asked the Council on Health Care to appoint one member to fulfil this role and monitor any new information that becomes available on Dental Care Systems.

The June 1982 issue of the Ontario Dentist indicates that, "it is unfortunate, however, that the ability to maintain our professional standards is gradually being eroded. Each month more members cave in to pressure to accept assignment or to routinely submit radiographs unnecessarily.

"More dangerous schemes are being planned. We are aware of two organizations (and there may be more) that are initiating programs where dentists sign an agreement to accept the insurance company benefit as payment in full on a direct assignment basis. In return, their patients are advised that they can obtain dental care from that office on a "no-charge" basis.

"This directly challenges the procedural policies that have been established across Canada. These policies have prevented us from being controlled by the people who purchase insurance and the companies that offer the policies to them."

If the Ontario Dental Association is referring to La Société des Services Dentaires (A.C.D.Q.) Inc. which has been established by the Quebec Dental Surgeons Association then I personally feel that the CDA should not only monitor the situation but report as well, in order that the dental profession across Canada is aware of the precedent being established which directly challenges policies which have prevented the profession from being controlled by the people who purchase insurance and the compa-

nies that offer the policies to them.

*Clyde Covit, DDS
Montréal, Québec*

Looking good

The Journal has been looking good over the last year or two. I would like to congratulate you and all the staff who have been responsible. I feel it is experiencing quite a turnaround.

*W. Walker Shortill, BSc, DDS
Winnipeg, Manitoba*



Following the President's Dinner at Ottawa's Château Laurier Hotel on September 24, the new president and his family graciously agreed to pose for this portrait for the CDA Journal. In the front row are Dr. William Thompson and his wife, Doris. Standing are daughter Barbara and son Scot.

CDA continues lobby against insurance premium tax

CDA continues to lobby against the federal government's proposed tax on premiums of employee dental plans paid by employers.

A submission was made to the House of Commons standing committee on finance, trade and economic affairs on September 22 by CDA Past-President Dr. Donald E. Williams.

The submission stated that the Canadian Dental Association believes "the arguments placed before the Canadian public by the Department of Finance are ill founded and will not produce the results that the then Minister of Finance (Allan MacEachen) suggested. In addition, the negative impact upon the level of dental care and the additional wasteful, nonproductive administration expense indicates that the proposal should be completely withdrawn."

It was pointed out that the numbers of Canadian employees covered by dental plans in 1981 was estimated to be approximately five million, with an additional seven million dependants also under this coverage.

"The growth and high level of private dental coverage in Canada and the degree to which employers are prepared to pay the full cost of such coverages indicates the perceived need for ongoing preventative as well as restorative dental care," the brief stated.

It was also drawn to the attention of the standing committee that the coverage has grown substantially "in both non-unionized and unionized contexts."

The brief warned that dental treatment under these circumstances should not be regarded solely as a "benefit" for the employee. "Good

No slackening of momentum

Following the presentation of the CDA brief to the House of Commons standing committee on finance, trade and economic affairs, a copy of the submission was sent to Finance Minister Marc Lalonde and Health and Welfare Minister Mme. Monique Bégin.

Finance Minister Lalonde was asked if a meeting could be set up between CDA and himself or with one of the senior officials of the finance department, at his earliest convenience.

A copy of the submission has also sent to every Member of the House of Commons.

CDA members have been urged, even if they have previously written to their local MP, to write again, expressing their personal concerns and those of the profession as a whole.

In this same interval, the CDA has sent a Communiqué to all members of the dental profession in Canada, advising them the inauguration of Dr. William Thompson's "Call the President Days" and the audits of professional management companies being carried out by officials of Revenue Canada.

dental care is neither discretionary to the employee or the employer unless ... it is deemed acceptable to permit inevitable dental and gum disease to go unchecked. Dental care is as essential to productivity and to reduction in absenteeism, as outlays to ensure safe working conditions."

The committee was also informed that "private dental plan coverages have relieved the public sector from the need to totally fund dental health care out of tax revenues."

Taxable anyway

It was pointed out that if the major federal government intent in its November, 1981 budget proposal was additional tax revenues, funds paid for dental health insurance claims are taxable anyway. "The employer contributions to private dental plans, though deductible to the employer, are taxable either to the insurance

carriers or to the dental practitioners."

A "significant drop in the utilization" of private dental coverage would seriously affect a majority of the 11,500 dentists in Canada, and "the requirement for support staff and hygienists would decline." The brief stated that the dental community represents "a significant industry."

Because a considerable portion of the insurance funds are "received by and taxed in the hands of dental professionals, and, assuming that dentists are in the highest tax brackets, a decline in plan coverages will result in the loss of 50 cents of tax revenue for every dollar no longer received by the dentists."

Level of health care

Much concern for the probable lower level of dental health care

Continued on next page

Manitoba extends dental coverage for children

More Manitoba children are eligible now for dental care with the recent extension of that province's Dental Health Services Act.

The Act was extended at least until 1983 for those children born in 1969 who were already covered under the program. These children will be 14 years old in 1983. The provincial Ministry of Health wanted them to continue to benefit from the dental health program.

Changes to the act also include those children born in 1976, who are now six years old. The extension means an additional 4,500 children will receive dental care.

Last year, the act covered those children born between 1969 and 1975, who were between 13 and seven years of age.

The Dental Health Services Act in-

volves only those children living in rural and northern parts of Manitoba. It is not universal across the province.

About 40,000 children in 30 school divisions participate in the program, which started five years ago, said Mr. Ross McIntyre, executive director of the Manitoba Dental Association. There is a total of 200,000 children in 45 school divisions in Manitoba, he added.

CDA continues

among the Canadian public was expressed. These declines, the submission pointed out, "will occur amongst the lower and middle income groups who can least afford the additional tax costs, but who also can least afford the costs of restorative care."

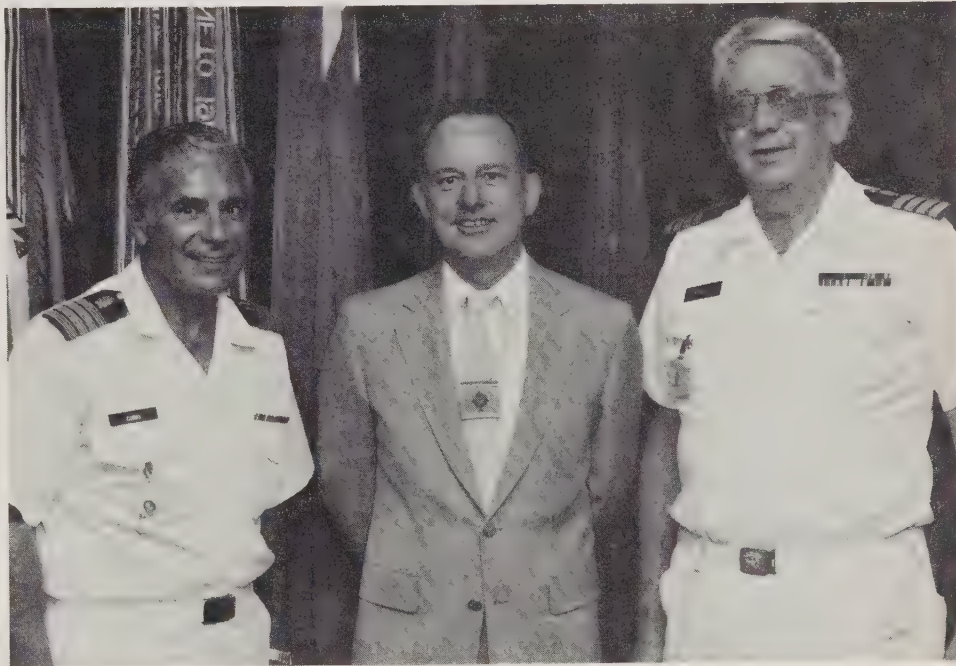
When taxpayers finally appreciate the impact of this proposal, on receipt of their T4 slips early in 1983, "there will be a demand for additional pay increases to compensate for the additional tax burden." It was also suggested that many employees will attempt to opt out of plans totally, thereby jeopardizing the very existence of group plans for others who wish to continue. For those who do wish to remain in the plans, costs would likely rise very substantially.

The brief recommended that "while the proposed taxability of other less socially beneficial "benefits" such as employee discounts, travel passes and standby charges for company cars has either been reduced or eliminated since November 12, 1981, no alteration in the proposed treatment of dental plan coverages has to date been forthcoming. In light of the fact that the reduction in dental care and the increased tax burden of this proposal

will fall most onerously on lower and middle income Canadians, the Cana-

dian Dental Association urges that this proposal be withdrawn."

UWO professor at U.S. Armed Forces Institute



Dr. David G. Gardner, Professor and Chairman, Division of Oral Pathology, University of Western Ontario, spent one year, commencing in September, 1981, at the Armed Forces Institute of Pathology, Washington, D.C., as a visiting pathologist in the Departments of Oral Pathology and Otolaryngic Pathology. Here he is seen at a farewell ceremony held recently at the AFIP, flanked by Captain Russell C. Cario, DC, USN (left), and Captain Vincent J. Hyams, MS, USN, chairmen of oral pathology and otolaryngic pathology respectively at the Institute. During his stay at AFIP, Dr. Gardner completed a major study on the biologic behavior of unicystic ameloblastomas and obtained further training in otolaryngic pathology.

Saskatchewan Adolescent Dental Plan is extended

Saskatchewan's Adolescent Dental Plan, introduced on September 1, 1981, has been extended beyond the 14-15 year-old group and will now provide treatment to approximately 75 per cent of the 16-year-olds in that province.

On the first anniversary of the plan, the provincial health department was "pleased with the great number of children who had their treatment fully completed by the participating practi-

tioners, and also the cost of the plan," said Dr. George Peacock, secretary and registrar of the College of Dental Surgeons of Saskatchewan.

"Further improvements to the plan are being encouraged by the College," Dr. Peacock said, "in the hope the practitioners may provide treatment to the entire adolescent population of the province. If such a population group was assigned to the private practitioner, the empty chair syn-

drome would be somewhat relieved in our province," he said.

The original Adolescent Dental Plan provided treatment for slightly more than 50 per cent of the eligible adolescents in the 14-15 age group. The majority of the private practitioners in the province participated in the plan which has been "apparently quite successful," Dr. Peacock said. Participating practitioners have found it "quite acceptable."

Violin playing — a pain in the jaw

Violin playing is not all beautiful music. It can create jaw pains for the violinists or violists.

Physical and emotional stress, coupled with vibrations created from playing the instrument, make string players more likely to suffer temporomandibular joint dysfunction, and other head and neck injuries, according to both a study published in a recent American Dental Association Journal and a similar survey conducted by dentist-violinist Dr. Milan Somborac of Collingwood, Ontario.

Six months ago Dr. Somborac distributed a questionnaire to members of the Toronto Symphony Orchestra. Of the 46 respondents, 25 were either violinists or violists. They all experienced a higher incidence of headaches and/or neckaches than the other 21 musicians, who acted as the control group.

The Judith Hirsch study published in the June, 1982 issue of JADA showed similar results, although the control group consisted of dental students. "The frequency of occurrence of TMJ noises and pain in the TMJ area was greater in the violin

and viola players than in a group of dental students. The limitation of mandibular movement and rightward deviation of the mandible on opening were significantly greater in these musicians than in the general population," she wrote.

Dr. Somborac believes his findings are more significant because his control group consisted of other musicians who must cope with the same stress factors as the violin/viola players. He is now preparing to conduct a nation-wide survey of musi-

cians, but expects only those who are experiencing TMJ problems will respond.

An amateur violinist himself, Dr. Somborac decided to survey other musicians after he began having head and neck problems, particularly a 'ringing in the ear' sensation.

"The Hirsch study," he said, "has provoked a lot of interest among violin players because of the finding that the centre chin rest resulted in an elimination of these signs and symptoms."

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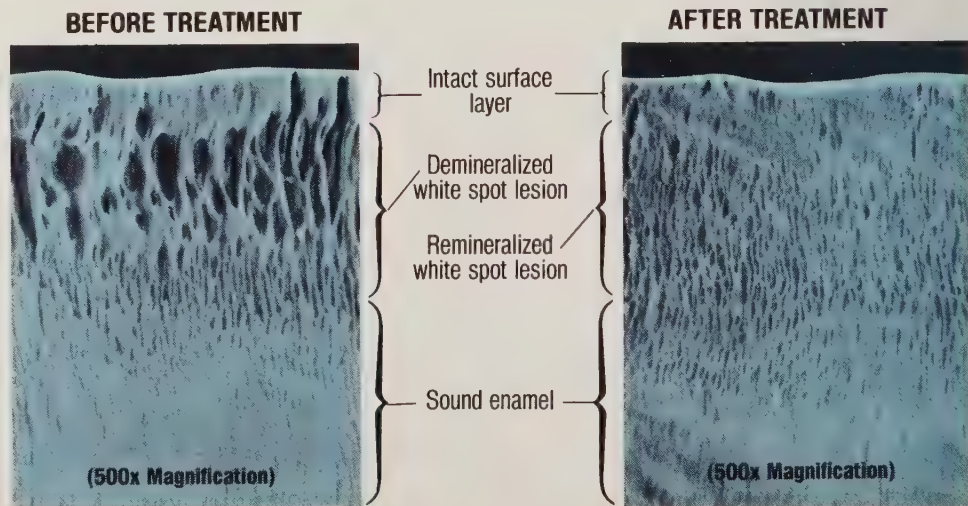
REMINERALIZATION.

Remineralization is the reversal of the demineralization process before a white spot lesion becomes a cavity (1). Studies have indicated that the presence of fluorides in demineralized enamel improves the natural remineralization process (2-5).

COLGATE'S TWO FLUORIDE STUDY.

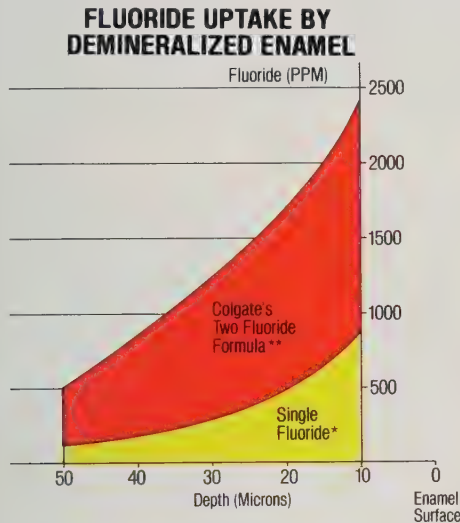
In vitro studies (6) on demineralized enamel show that treatment with Colgate's combination of sodium monofluorophosphate and sodium

fluoride** actively promotes more complete remineralization of white spot lesions than a single fluoride formulation*. This improved remineralization of white spot lesions, we believe, ultimately leads to a greater reduction in cavities.



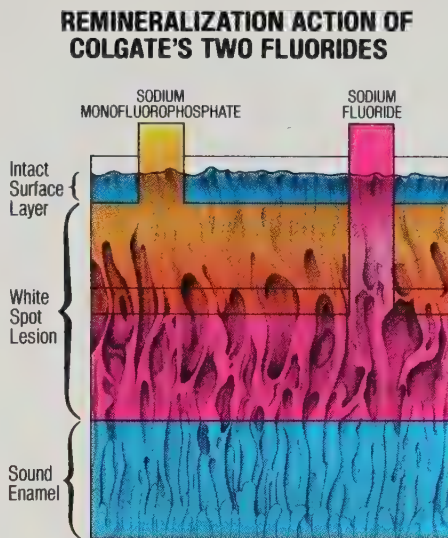
HOW TWO FLUORIDES REMINERALIZE MORE COMPLETELY.

Laboratory research shows that Colgate's combination of sodium monofluorophosphate at 0.76% and sodium fluoride at 0.10% delivers significantly more fluoride deeper into demineralized enamel, thus providing superior conditions for remineralization.



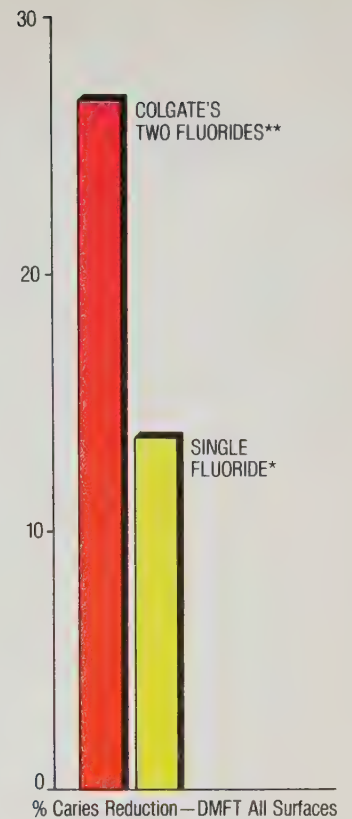
Within the white spot lesion, sodium monofluorophosphate remineralizes enamel primarily at the surface while sodium fluoride penetrates deeper to remineralize sub-surface regions. This combined remineralizing action

of Colgate's two fluoride formula promotes more complete remineralization of white spot lesions than a single fluoride formulation.*



COLGATE'S CLINICAL PROOF.

The results of a three year clinical study (7) show that Colgate's combination of two fluorides provides significantly greater reduction in caries. In vitro research indicates that this results from more complete remineralization of white spot lesions before they progress to cavities.



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REFERENCE

1. Backer-Dirks, O., J. Dent. Res., **45**, 503-511, 1966.
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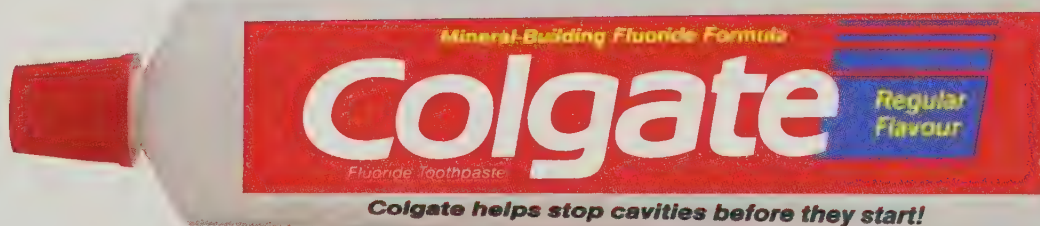
* Sodium monofluorophosphate (0.76%)

** Sodium monofluorophosphate (0.76%) and sodium fluoride (0.10%)



† "Colgate Toothpaste contains sodium monofluorophosphate and sodium fluoride which are, in our opinion, effective decay preventive agents and are of significant value when used in a conscientiously applied program of oral hygiene and regular professional care."

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Dr. William R. Thompson installed as CDA president

Military pomp and pageantry and the grandeur of Ottawa's stately Chateau Laurier Hotel provided an appropriately impressive setting for the installation of Dr. William R. Thompson as president of the Canadian Dental Association on September 24.

Members of the Board of Governors, CDA councils, committees and specialty sections, and their wives, passed through a doorway flanked by two unflinching guardsmen, complete with bearskin hats, to a reception, held prior to the dinner.

When the head table guests, including the new President, Dr. Thompson, and Past-President Dr. Donald E. Williams entered the Adam Room for the dinner, they were saluted by a trumpeter's fanfare.

Members of the Governor-General's Footguards band played at the reception and again at the dinner.

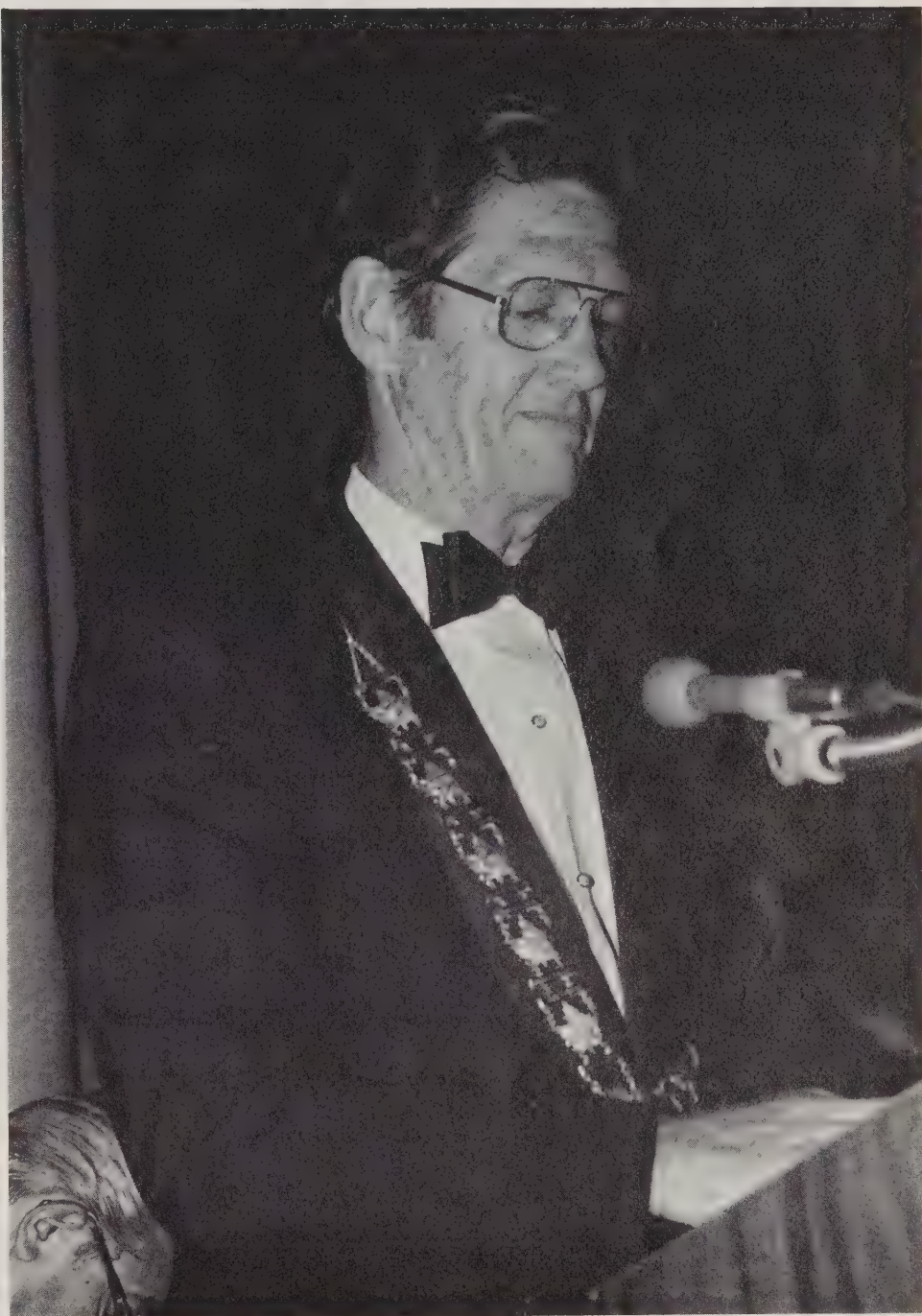
Communications — main thrust

Past President Dr. Donald E. Williams, in his review of the past year, said "perhaps the greatest thrust of my efforts has been devoted to communications, within and beyond our association, in an effort to promote understanding and mutual respect."

He said that he believed the CDA had "expanded our horizons and improved communications in many areas," including close contact with federal government departments, other dental and public health organizations and other professional organizations, both in Canada and internationally.

Dr. Williams thanked the CDA governors, council and committee chairmen, the executive director and headquarters staff for their service during his term as president.

Dr. Williams related some amusing



Dr. William R. Thompson delivers his first speech as president of the Canadian Dental Association, following his installation at the President's Dinner, held in Ottawa on September 24.

accounts of problems encountered during the year, while carrying out his duties as president. He classified these as "things they never told me when I became president." They included two hotel fires and several false alarms, "January snowstorms three days in a row," and throwing out his

back in P.E.I. "while I was doing exercises to strengthen my back."

He introduced Dr. Thompson as "friend, confidante, proven leader, a person who is dedicated to the betterment of dental health, not only in Canada, but internationally."

Continued on next page

Dr. Thompson, who also stressed communications in his inaugural address, said that "if the profession is kept more fully and more directly informed about the specific ongoing issues, and is provided with the rationale for decisions, we will win support, or indeed, there will be positive recommendations, which will result in further improvement."

To this effect, he announced that he will initiate a limited number of "Call the President" days during the year, in which any CDA member may call to voice his concerns or ask questions.

He said that there will be continued stress in the area of "government relations and interaction. It is in this area that the CDA can be of the greatest benefit to the corporate members and, therefore, to all dentists."

'Presence on Parliament Hill'

Dr. Thompson said he believed the "CDA presence on Parliament Hill is not only beneficial, but in today's financial climate, absolutely vital.

"The busyness factor," which is of primary importance in many areas of Canada, "complicated by the manpower situation and the financial climate," will get much attention this year.

"I am confident that improvement will be forthcoming. CDA through its Board, its councils and committees, will play their part," he said.

The profession, he said, "will be required to develop new initiatives to urge a greater percentage of the population to seek dental care."

Fiscal responsibility will continue to be emphasized within the CDA this year, he said, "to ensure that we will remain in a positive financial position."

Another priority, Dr. Thompson said, will be the matter of peer review. A workshop meeting to deal with this matter had been organized in November.

There will be "continued dialogue during the next year with allied organizations in the health team," he said. This would "ensure the best possible co-ordinated efforts for organized dentistry."

He presented the past-president's pin to Dr. Williams and expressed thanks to Dr. Williams' wife Tess "for your efforts in support of Don and the CDA."

Dr. Thompson achieved distinction in two careers

"Our new president has already enjoyed two careers and will, in 12 short months, experience the equivalent of another," said Past-President Dr. Donald E. Williams, when introducing Dr. William R. Thompson at the President's Dinner at the Chateau Laurier in Ottawa on Sept. 24.

Highlights of those first two careers follow.

Born in Campbellford, Ontario, Dr. Thompson graduated from the University of Toronto in 1949. He received certification in oral and maxillofacial surgery from the same school in 1969.

Dr. Thompson's military career, which spans four decades, has been interrelated with dental education

and organized dentistry. He served as Head of the Department of Oral Surgery at CFB Borden, as Staff Officer in the Division of Dental Services at National Defence Headquarters, as Commanding Officer at CFB Trenton, and as Director of Dental Treatment Services. He was appointed Director General of Dental Services in 1976.

For the past six years Dr. Thompson has been a member of the CDA Board of Governors and was elected to the executive council in 1980.

He is an Honorary Fellow of the Royal College of Dentists of Canada, a Fellow of the International College of Dentists and a former Honorary Dental Surgeon to the Queen. From 1975-80, Dr. Thompson was chairman

of the Defence Forces Dental Services Commission of the Fédération Dentaire Internationale.

He received the Pierre Fauchard Medal from the National Order of Dental Surgeons of France in 1979 for his contributions to international dentistry. Dr. Thompson was also appointed Commander of the Order of Military Merit in June, 1981 in recognition of his meritorious service and devotion to duty as a member of the Canadian Forces.

For relaxation, Dr. Thompson enjoys gardening, boating, water skiing and escaping to his farm near Trenton, Ontario.

He is married to the former Doris Hays and they have three children.

Dr. Robert Hicks named CDA president-elect



Dr. Robert Hicks of West Vancouver, right, who was elected president-elect of the Canadian Dental Association at the Board of Governors annual meeting in Ottawa, was congratulated by Dr. Ron Markey, President of the College of Dental Surgeons of British Columbia, when the results of the elections were announced.

Dr. Robert Hicks of West Vancouver was named president-elect of the Canadian Dental Association at the CDA Board of Governors annual meeting in Ottawa, on Sept. 25.

A graduate of the University of Alberta in 1962, Dr. Hicks practised dentistry in North Vancouver until 1965. He went on to gain an MS degree in Orthodontics from Northwestern University, graduating in 1967. He has practised orthodontics in West Vancouver since 1967.

He has been a member of the CDA Board of Governors since 1974 and from 1978 has served as chairman of CDA's Taxation Committee.

In his home province, he has been president of the College of Dental Surgeons of B.C. and president of the Vancouver & District Dental Society. He is currently serving as president (1982-83) of the Cancer Control Agency of B.C.

Dr. Hicks is a Fellow of the Inter-

national College of Dentists and a member of the Pierre Fauchard Academy.

He was recently elected president of the Canadian Association of Orthodontists.

From 1968 to 1980, he was a part-

time member of the Faculty of Dentistry at the University of British Columbia.

He has also been active in community affairs and has served as an Alderman for the City of West Vancouver from 1968 to the present.

CDA Retirement Savings Plan

Unit values of the Canadian Dental Association's Retirement Savings Plan stood as follows on September 30, 1982.

<i>Common Stock Fund</i>	\$51.7628
<i>Fixed Income Fund</i>	\$30.8289
<i>Guaranteed Fund</i>	\$24.4771
<i>Balanced Fund</i>	\$11.2069

Total assets (market value) of the plan were \$30,620,497.

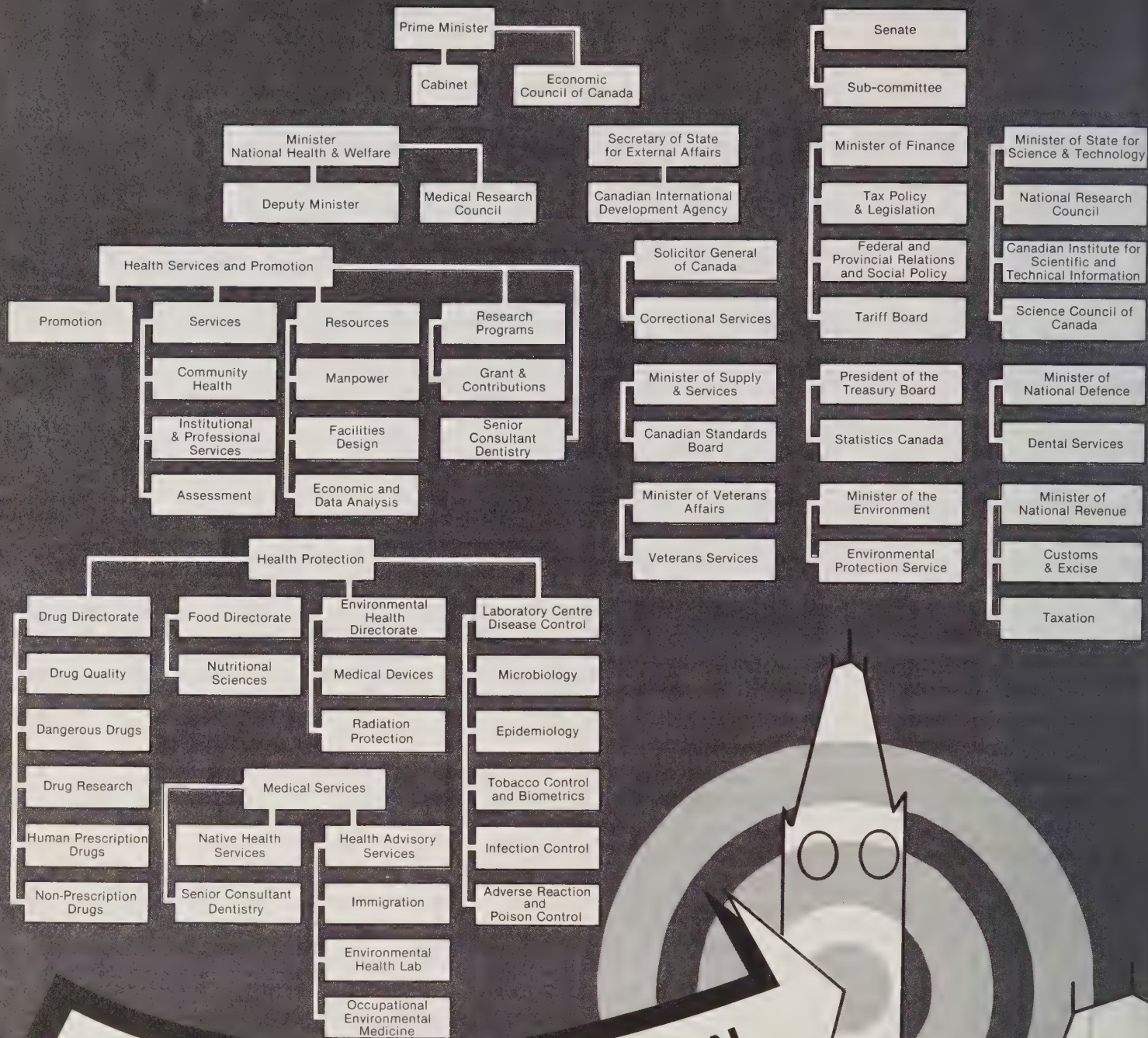
The previous month's figures, as of August 31, 1982, stood as follows:

<i>Common Stock Fund</i>	\$51.1399
<i>Fixed Income Fund</i>	\$29.6552
<i>Guaranteed Fund</i>	\$24.2083
<i>Balanced Fund</i>	\$11.1450

Total assets (market value) of the plan were \$30,453,622.

For further information write to: Canadian Dental Service Plans Inc., Ste. 600, 2 Lansing Square, Willowdale, Ontario M2J 4Z3 or call the central information services of CDSPI At 1-800-268-5418 (497-7171 in Metro Toronto).

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Canadian Dental Association

Board of Governors – vignettes



1. This Western group obviously found Central Canada hospitality to their liking. They are, left to right: Dr. Doug McDougall, Dr. Ted Ramage, Dr. Ron Markey, Dr. Mac Leitch and Dr. Frank Copithorne, all of British Columbia, and Dr. Cliff McCormick of Winnipeg.



2. The CDA president's Dinner was a pleasant event for this group. They are, left to right: Linda Berry and Peggy Knill, of Toronto and Hamilton; Mrs. Maddie Kinniburgh, Lethbridge and Mrs. Gina Martinello of Edmonton. Standing are: Dr. Ross McIntyre and Dr. Gene Solmundson, both of Winnipeg, Dr. Bob Kinniburgh and Dr. Bruno Martinello.



3. The President's party brought smiles to this Québec group. They are, left to right: Dr. Jacques Dufour, Ste. Foy; Dr. Jean-Claude Giguère and Mme. Louise Giguère, Sillery; Dr. Robert Dupont and Mme. Hélène Dupont, Montréal; and Dr. Pierre-Yves Lamarche and Mme Solange Lamarche, Montréal.



4. Another Western group who enjoyed each other's company. They are, left to right: Ken Croft and Mrs. Muriel Croft, Vancouver; Dr. Bernie White and Dr. George Peacock, both of Saskatoon; Mrs. Nicky Niedermayer and Dr. Jack Niedermayer, Regina; and Dave McLeod of Saskatoon.

5. CDA Board of Governors chairman, Dr. Nick Mancini, salutes Mrs. Tess Williams on behalf of the Association, for her support of "Don and the CDA."

6. CDA President Dr. William Thompson presents the past-president's plaque to Dr. Donald E. Williams.

7. Dr. Douglas B. Smith, right, president of the ODA, offers his congratulations to Dr. William Thompson.

8. Two of CDA's past presidents, Dr. James P. Coupland, left, (1966-67), and Dr. A.J. Coughlan (1953-54), enjoyed the company of colleagues at the President's Dinner.



1. Des gens de l'Ouest qui ont certes apprécié l'hospitalité du Canada central. De gauche à droite: le Dr. Doug MacDougall, le Dr Ted Ramage, le Dr Ron Markey, le Dr Mac Leitch et le Dr Frank Copithorne, tous de la Colombie-Britannique, et le Dr Cliff McCormick de Winnipeg.

2. Cet autre groupe a aussi passé un bon moment au dîner du président. De gauche à droite: Linda Berry et Peggy Knill, de Toronto; Mme Maddie Kinniburgh, de Lethbridge, et Mme Gina Martinello, d'Edmonton; debout: le Dr Ross McIntyre et le Dr Gene Solmundson, de Winnipeg, le Dr Bob Kinniburgh et le Dr Bruno Martinello.

3. Du Québec, la joie de vivre se reflétait sur les visages, après la réception du Château Laurier. De gauche à droite: le Dr Jacques Dufour, de Sainte-Foy; le Dr Jean-Claude Giguère et sa femme, Louise, de Sillery; le Dr Robert Dupont et sa femme, Hélène, de Montréal; le Dr Pierre-Yves Lamarche et sa femme, Solange, de Montréal.

4. Un autre groupe de l'Ouest qui rivalisait de bonne humeur avec les autres tables. De gauche à droite: Ken Croft et sa femme, Muriel, de Vancouver; le Dr Bernie White et le Dr George Peacock, de Saskatoon; Mme Nicky Niedermayer et le Dr Jack Niedermayer, de Regina; ainsi que Dave McLeod, de Saskatoon.

5. Le Dr Nick Mancini, président du Bureau des gouverneurs, a rendu un hommage particulier à Mme Tess Williams. Il lui témoignait ainsi la reconnaissance de l'association pour l'appui qu'elle a apportée à "Don et à l'ADC."

6. Le Dr William R. Thompson, président de l'ADC, présente au Dr Donald Williams, à droite, la plaque du président sortant.

7. Le Dr Douglas B. Smith, président de l'Association dentaire de l'Ontario, félicite le Dr William Thompson après son installation.

8. Deux anciens présidents de l'ADC, les Drs James P. Coupland, à gauche (1966-67) et A.J. Coughlan (1953-54), sont heureux de retrouver d'anciens collègues lors du dîner présidentiel.



Fluoride shortage has become acute in Canada

The shortage of hydrofluosilicic acid (HFS), a phosphate fertilizer by-product used to fluoridate many community water supplies, has become acute in Canada.

"Rotten."

That was the assessment of the situation by both Bruno Lenarduzzi, production manager for CIL, a major HFS supplier for Eastern Canada, and Jack Merryfield, chemical sales manager for Cominco, a major supplier in the West.

Lenarduzzi and Merryfield don't expect the shortage will turn around until early in 1983.

In the United States, however, the situation appears to be "easing up." That is where the shortage of HFS originated earlier this year. Thomas Reeves, a fluoridation engineer with the Centers for Disease Control in Atlanta, Georgia, said several U.S. fertilizer plants have begun to produce the HFS, after being shut down for several months in the summer.

Reeves told the CDA Journal in late September the inventory of excess fertilizer is diminishing to some degree now and he is "hopeful the shortage will decrease even further within the next few months.

"But that's only a guess on our part," he said.

Tight money, high interest rates and price increases have all contributed to the HFS shortage. Manufacturers of ammonium phosphate fertilizers, of which HFS is a by-product, curtailed production when farmers and other fertilizer consumers began to drastically reduce their purchases of the chemical fertilizers. Some manufacturers expressed hope that farmers will purchase the fertilizers again early in 1983, in preparation for spring planting.

In the meantime, many Canadian communities dependent on HFS for

fluoridation of their water systems are forced to cope with the shortage until demand picks up.

Almost all the communities are still fluoridating with HFS when they can get their quotas from regular suppliers. Few can afford the expense of converting their systems to accommodate the solid fluorides, such as sodium fluoride or sodium silico fluoride, which are not affected by the phosphate fertilizer slowdown.

Ottawa is one of the exceptions.

Originally, both water treatment plants pumped sodium silico fluoride into the community water. But a concern for the employees' health which might be adversely affected from the powder fluoride prompted officials to adapt one of the plants to take the liquid HFS. The old equipment used when the plant handled the powdered form was still around, and was installed when the shortage occurred this summer.

Other Canadian communities have not been as fortunate. They are experiencing difficulty in getting their allotted amounts from regular suppliers.

Near-crisis in Ontario

A near-crisis has occurred in Ontario, where 80 per cent of the population receiving the benefits of community water fluoridation are served by HFS, supplied by CIL.

The Ontario Dental Association has circulated a newsletter advising the province's dentists of alternative measures to provide fluoride protection during the period of the shortage.

CIL advised the provincial Ministry of the Environment in late July that it could probably keep the smaller users fully supplied but the 13 larger users — Hamilton, Peterborough, Belleville, Cornwall, London, Windsor, Toronto, the Ottawa-Carleton, Durham, Malton and Ni-

agara regions, and Mississauga and Sarnia areas — would not receive their full dosages.

By late September, CIL confirmed it could not meet its original estimates and that it "has been unable to keep up with most of its accounts."

Lenarduzzi said the situation "has not improved at all. The company is producing at 25-50 per cent of its normal requirements (and) no municipality is getting 100 per cent of its regular supply.

"We thought we would be able to keep up with our original estimates, but our phosphate levels just haven't met our projections," he said. "If you haven't got it, you haven't got it."

"We're hoping to see a turn-around in the demand for ammonia phosphate this winter when farmers start preparing for the spring season," said Vic Mudie, technical sales representative for CIL's general chemicals division. "It's safe to say it will be at least another three to four months" before the demand even begins to pick up.

Health officials and other experts in Ontario polled by the Journal are equally pessimistic.

A meeting of the Metro Toronto health directors was held in September to discuss ways to cope with the shortage in Toronto which, by virtue of its size, is hardest hit by the shortage in the province. HFS supplies to the city were curtailed July 31 and Dr. Ken Ryan, senior consultant with the public health resource service for the Ontario Ministry of Health, said Toronto will be without fluoride until December 1.

He said Toronto will then receive enough HFS to fluoridate the water system at the optimal level for about one month, at which time the health directors will discontinue fluoridation until they have a sufficient amount of

the chemical on hand to fluoridate at all locations at the full rate for a fixed period. A letter to this effect, alerting the medical officers of health in Toronto, was sent out by Paul Emery, director of water supply for the city.

Dr. James Schosenberg, president of the Ontario Society of Public Health Dentists, said fluoridating at the optimal level for periods at a time "will produce less of an upswing in cavities than if we reduced the fluoride in order to fluoridate all the time."

The HFS shortage has struck other parts of Canada as well.

Maritimes feel effect

Dr. Blahut of the division of community dentistry at Dalhousie University reported that one smaller municipality in Nova Scotia is experiencing difficulty.

Several Quebec municipalities, and Halifax, Nova Scotia, and Moncton, New Brunswick, are supplied with HFS by CIL, which has reduced its allotment to all its customers.

Although there is a shortage of HFS in western Canada, the shortage does not appear to be as acute, perhaps because fewer communities have fluoridated water systems.

Both Edmonton, Alberta and Winnipeg, Manitoba have been hit by the HFS shortage, but the situation seems to be improving.

Edmonton — 10 weeks without

Edmonton was totally out of fluoride for 10 weeks until noon of September 27, when it was reported that HFS supplies from Cominco had arrived. Cominco is guaranteeing a regular supply of HFS every two weeks, said Dr. Tony Hargreaves at University of Alberta's faculty of dentistry.

"It was very bad here and for less than three months we were out of

fluoride," he added. But Dr. Hargreaves could not foresee any problems now that Cominco is on track again.

According to Hargreaves, 41 per cent of the province is fluoridated by either sodium fluoride or HFS. Edmonton is by far the largest fluoridated community.

Jack Merryfield of Cominco reiterated Dr. Hargreaves' optimistic hopes. "As far as our customers are concerned, we're starting to catch up" and running about 60 per cent of our normal production level right now, he said. Cominco has scheduled regular shipments to its customers in western Canada "right through to year end" when the company hopes it will be back to supplying a normal inventory.

Things are rosier for Winnipeg, also.

The Manitoba capital originally expected to receive half its regular HFS supply from Chemtech Industries Inc. of St. Louis, Missouri for an indefinite period. But when contacted in September, Dr. Leo Konyk, director of dental services for the city, told the Journal the city is receiving its full allotment and will only replenish with sodium fluoride if the supply is reduced by half.

In British Columbia and Saskatchewan there have not been any reports that communities are suffering from the HFS shortage.

For the duration of the period when fluoride levels in the community water systems are low or non-existent, Dr. Ralph Burgess, chairman of the department of preventive dentistry at the University of Toronto, recommends the application of a concentrated fluoride solution on the teeth, especially if the shortage lasts for longer than four months.

The rate of tooth decay could increase, especially among 6-7 and

11-12 year-old children, he said. These children are growing their permanent teeth, which benefit most from a fluoride water treatment program.

Fluoride supplements

Dr. Burgess does not recommend the administration of fluoride supplements, but Dr. Ryan of the Ministry of Health said the dental directors for Metro Toronto are considering supplements if they can determine when and how much fluoride will be pumped into the water system at any given time. Once an accurate schedule has been drawn up, supplements can be administered when it is certain fluoride will not be in the water. (Too much fluoride can be just as detrimental as too little fluoride.)

Dr. Schosenberg said the Ontario Society of Public Health Dentists is recommending fluoride rinses or topicals "depending on the individual clinical judgement. Obviously, a 15-year-old without cavities doesn't need a fluoride rinse. We're not recommending supplements because people don't know when fluoride is and isn't in the water. Only if you know precisely when it isn't in the water, then the dentist may see fit to administer supplements."

Dr. John Stamm of the department of community dentistry at McGill University concurs. "Parents," he said, "might be wise to put an extra emphasis on fluoride rinses and insist more vigorously on topical fluoride applications when their child is at the dentist for a check-up. I wouldn't recommend going too far and getting fluoride supplements."

Dr. Stamm said the effects of no fluoride in the water would not be obvious "as long as it was only a one-time interruption and it didn't extend beyond four to six months."

Briefly —



Dr. Robert D. Kinniburgh

Dr. Robert David Kinniburgh of Lethbridge, Alberta, is the new President of the Alberta Dental Association.

He succeeds Dr. P.J. Kirby of Edmonton.

A former member of CDA's Board of Governors, Dr. Kinniburgh attended Gonzaga University in Spokane, Washington. He obtained his dental degree from Creighton University in Nebraska in 1969 and opened a practice in Lethbridge.

Dr. Kinniburgh is a past president of the Lethbridge District Dental Society and served on the Board of Directors of the Alberta Dental Association for several terms.

♦♦♦♦♦♦♦♦

Dr. David Donaldson of the UBC restorative dentistry department received a \$25,000 research award from the British Columbia Health Care Research Foundation.

He is studying the prevalence of nitrous oxide pollution among dentists and their staff, and the efficiency of current preventive devices.

The Foundation awarded more than \$1.5 million in lottery funds to several health research projects in that province. The awards are given to encourage clinical and applied research, and demonstration projects aimed at improving health care delivery systems.

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Dental students may now qualify for three new annual Terry Fox Cancer Research Clerkships, established by the National Cancer Institute of Canada.

Dr. David Gardner, CDA's representative to the NCI, said that originally the clerkships were designed for medical students.

The objective of this program is to make it possible for selected medical and dental students to obtain training in the methodologies and philosophy of cancer research. The three clerkships for dental students, tenable only in Canada, cover at least 14 consecutive months, spanning two summers and the intervening academic year.

Each fellowship is valued at \$10,000, to be paid in instalments of \$4,000 for each of the two summer periods and \$2,000 during the intervening academic year. In addition, \$2,000 will be provided each summer to the supervisor as a contributor to the cost of research supplies.

The NCI has also opened up a number of other awards to suitably qualified dental students. These awards will be funded out of the general revenue rather than the Terry Fox Marathon of Hope monies.

♦♦♦♦♦♦♦♦



Dr. Samuel Newman

Dr. Samuel Newman of Toronto has been elected president of the Canadian Academy of Periodontology for 1982-83. Dr. Allen Wainberg of Montreal was elected secretary-treasurer.

A native of Sydney, Nova Scotia, Dr. Newman received his DDS degree

from Dalhousie University in 1956. He studied in the graduate program at the University of Pennsylvania in 1961 and Boston University in 1962. He is a part-time staff member in the Department of Periodontics, Faculty of Dentistry, University of Toronto and also of the Dental Department of Mount Sinai Hospital.

Dr. Wainberg is Assistant Professor, Division of Periodontology, Faculty of Dentistry, McGill University. His current research activity is an investigation of the relationship of osseous defects to occlusal trauma.

He is an examiner for the Royal College of Dentists of Canada.

He finds relaxation in sailing and growing orchids.

♦♦♦♦♦♦♦♦

The present economic situation, coupled with dentistry's manpower situation, has resulted in an increase in the number of bankruptcies filed by Ontario dentists.

Mr. John Gillies, executive director of the Ontario Dental Association, said recent figures released by the provincial registry agency indicate bankruptcies have increased in the past two years.

Five dentists declared bankruptcies in 1980. This number increased to six in 1981, Gillies said.

Before 1980, the average number of yearly bankruptcies was two, and these were usually caused because the dentists were involved in outside business practices.

Gillies said the rise in bankruptcies is indicative of the economic times. The fact that dentists are in oversupply and are forced to share a smaller patient load does not help, he added.

♦♦♦♦♦♦♦♦

Morris H. Wechsler, BSc. DDS, FRCD (C), has been appointed chairman of the Department of Orthodontics, Faculty of Dentistry, University of Montreal. He is an Associate Professor of Orthodontics, University of Montreal, and lecturer, Faculty of Dentistry, McGill University. He is co-chairman, Orthodontic section, Jewish General Hospital,

Montreal, and a Diplomate of the American Board of Orthodontics. Dr. Wechsler is also in private practice in Côte Saint-Luc, Québec. Dr. Wechsler replaces Dr. Claude Remise who acted as chairman of the Department of Orthodontics (Division of Oral-Health) since 1973.

Dr. David A. Clarke of Kelowna, British Columbia, has been elected president of the Canadian Public Health Association.

A native of Toronto and an MD graduate of the University of Western Ontario, Dr. Clarke is medical director of the South Okanagan and Similkameen Health Centre in Kelowna.

Because of current economic constraints, he said in a statement to CPHA's 3,000 members, there is "an opportunity to put the major emphasis on prevention (in the area of public health) and the promotion of healthier lifestyles for all."

He believes society has to come to grips with such major issues as the cost to society of motor vehicle accidents, (\$10 billion annually) alcohol and drug abuse, cigarette smoking, gluttony, and also be concerned about the handicapped and the disadvantaged. "Concerted public action and massive public education are necessary to address these problems," he said.



Dr. David A. Clarke

Dr. Norman Levine, Professor and Chairman of the Department of Paedodontics, University of Toronto,



Dr. Norman Levine

was named President-Elect of the International Association of Dentistry for the Handicapped at its Sixth Congress, held in Toronto July 20-25.

Also elected to the executive were: Dr. Haim Sarnat of Israel, Past-President; Dr. Erling Bölin, Sweden, as President; Dr. Peter Westphal, also of Sweden, Secretary-Treasurer, and Dr. Susumu Uehara, Japan, as Member-at-Large.

Dr. Levine was also elected to Board of the Academy of Dentistry for the Handicapped, of which Dr. Len Smith of Calgary is President. The Academy is the North American association with members from both the United States and Canada.

Dr. David Kenny, Dentist in Chief of the Hospital for Sick Children in Toronto, and Dr. Morris Milner, Director of Rehabilitation Engineering of the Ontario Crippled Children's Centre, also in Toronto, recently received a grant to study the problem of drooling in cerebral palsy victims.

The grant, administered by the Ontario Ministry of Community and Social Services, is for two years and is worth approximately \$70,000.

Their research will focus on children with severe cerebral palsy who have a drooling problem. Dr. Milner said that the aim of the research is to control or stop drooling in CP victims.

"Drooling in these children is a major cosmetic problem, which can become a major social problem later on," he said.

"Related problems include the inability to hold the head up, the inability to close the mouth properly and the inability to control the tongue," Dr. Milner said.

The research is designed to discover where the discrepancies and disruptions in the normal swallowing process occur in CP victims. Three groups of children will be studied, 36 children in all.

"There will be one group of non-motor-impaired children, one group of quadruplegic cerebral palsy children who do not drool and one group of quadruplegic CP children who do drool," Dr. Milner said.

"We will be looking at the frequency of swallowing, correlating swallowing frequency and drooling rates, and studying the patterns of oral muscle activity during swallowing. One of the research techniques used will be electro-myography, which involves attaching surface electrodes to the child. This will tell us which muscles are switched on and when," Dr. Milner said.

It is hoped the research may lead to the development of a signal device which would tell a CP victim when to swallow.

The new editor of the ADA (Alberta Dental Association) News Information is Dr. R.B. Campbell. He replaces Dr. George Decker, who has retired.

A graduate of the University of Alberta in 1941, Dr. Campbell served in the Canadian armed forces from 1942-46. He practised dentistry in Lamont and Edmonton before joining the Department of Northern Health & Welfare in 1962. In 1975 he transferred to DVA, retiring in 1980.

Dr. Campbell is a past president of the Alberta Dental Association.

In the telephone numbers of adjusters' offices in the CDSPI article, "What to do if you are sued," in the September edition of the CDA Journal, the number for the Granby, Quebec office was incorrect. It should have read: (514) 378-3936.

Presentation of CDRF Award



Dr. Catalena Birek, left, of Toronto, a researcher in the field of periodontal physiology, received the Canadian Dental Research Foundation Award for 1982 from Dr. Donald E. Williams at the CDA Board of Governors annual meeting in Ottawa on September 25. Dr. Jane Aubin, right, representing the Faculty of Dentistry of the University of Toronto, received the Institutional Award on behalf of the Dean, Dr. A.R. Ten Cate.

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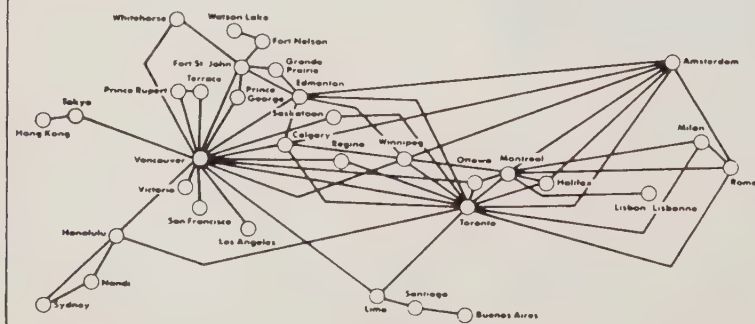
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Obituaries

CORCORAN, J.S.: August 15, 1982. A graduate of the University of Toronto in 1943, Dr. Corcoran of Midland, Ontario was a member of the Muskoka-Simcoe Dental Society.

DUNCAN, Wilfred McLaren: June 15, 1982. Dr. Duncan graduated from Loyola University in Chicago in 1917 and practised in both Didsbury and Calgary, Alberta.

FERGUSON, Cecil William (Bill): May 8, 1982. Born in 1918, Dr. Ferguson graduated in dentistry from the University of Toronto in 1954. He practised in Hope, B.C.

HICKS, K.W.: Dr. Hicks, of Kailu, Hawaii, died August 21, 1982.

IRELAND, F.L.: September 11, 1982. Dr. Ireland of Rose-town, Sask., was born in 1918 and graduated from the University of Illinois in 1951.

McGUIGAN, James P.: September 8, 1982. Dr. McGuigan of Halifax, N.S., was born in 1911 in P.E.I. and graduated from Dalhousie University's faculty of dentistry in 1939. He was a former part-time member of that faculty for 20 years, a past-president of the Halifax County Dental Society, Nova Scotia Dental Association and Nova Scotia Provincial Dental Board, and past chairman of the ethics council of the Canadian Dental Association.

ZINN, J.H.: August 28, 1982. A life member of the Royal College of Dental Surgeons of Ontario, Dr. Zinn graduated from the University of Toronto in 1915. He practised in Shelburn, Ontario.

Motrin[®] (ibuprofen) tablets

Product Information

Action: Ibuprofen has demonstrated anti-inflammatory, analgesic and antipyretic activity in animal studies designed to specifically demonstrate these effects. Ibuprofen has no demonstrable glucocorticoid effect.

Following a single 200 mg dose of ibuprofen in humans, useful blood levels were demonstrable in 45 minutes and still present in six hours but at barely detectable levels. Peak levels occurred at approximately one hour after ingestion. Levels were lower when taken in conjunction with food.

Ibuprofen is rapidly metabolized and eliminated in the urine. The excretion of ibuprofen is virtually complete 24 hours after the last dose. The serum half-life of ibuprofen is 1.8 to 2 hours. There is no evidence of drug accumulation or enzyme induction.

Ibuprofen has been found to be less likely to cause gastro-intestinal bleeding in doses usually used than is acetylsalicylic acid.

Clinical trials in man have shown activity of a dose of 1200-1800 mg of ibuprofen daily to be similar to that of 3.6 grams of acetylsalicylic acid daily.

Indications and Clinical Uses: Motrin (ibuprofen) is indicated for the treatment of rheumatoid arthritis and osteoarthritis. Motrin is also indicated for the relief of mild to moderate pain accompanied by inflammation in conditions such as musculo-skeletal trauma and post-dental extraction. Motrin is also indicated for the relief of pain associated with dysmenorrhea.

Contraindications: Motrin (ibuprofen) should not be used in patients who have previously exhibited hypersensitivity to it, or in individuals with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to acetylsalicylic acid or other nonsteroidal anti-inflammatory agents (see WARNINGS).

Motrin should not be used during pregnancy, in nursing mothers or in pediatric patients because its safety under these conditions has not been established.

Warnings: Anaphylactoid reactions have occurred in patients with known A.S.A. hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe have been reported in patients receiving Motrin (ibuprofen). Peptic ulceration, perforation, or severe gastrointestinal bleeding can have a fatal outcome, and although few such reports have been received with Motrin, a cause and effect relationship has not been established. Motrin should be given under close supervision to patients with a history of upper gastro-intestinal tract disease.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in colour vision have been reported. If a patient develops such complaints while receiving Motrin (ibuprofen), the drug should be discontinued and the patient should have an ophthalmologic examination. Fluid retention and edema have been reported in association with Motrin; therefore, the drug should be used with caution in patients with a history of cardiac decompensation or renal disease.

Motrin, like other nonsteroidal anti-inflammatory agents, can inhibit platelet aggregation but the effect is quantitatively less and of shorter duration than that seen with acetylsalicylic acid. Motrin has been shown to prolong bleeding time (but within the normal range) in normal subjects. Because this prolonged bleeding effect may be exaggerated in patients with underlying hemostatic defects, Motrin should be used with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients on Motrin should be cautioned to report to their physicians signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

When Motrin is added to the treatment program of patients who have been on prolonged corticosteroid therapy, and it is decided to discontinue this therapy, the corticosteroid should be tapered slowly to avoid exacerbation of disease or adrenal insufficiency.

Aseptic meningitis has been reported in connection with Motrin therapy in patients with systemic lupus erythematosus. Such patients may also develop hypersensitivity reactions to Motrin such as fever, rash or abnormal liver function more often than those with other disorders. Caution should therefore be exercised when considering Motrin therapy for patients with systemic lupus erythematosus.

Drug Interactions

Coumarin-type anticoagulants: Several short-term controlled studies failed to show that Motrin significantly affected prothrombin times or a variety of other clotting factors when administered to individuals on coumarin-type anticoagulants. However, because bleeding has been reported when Motrin and other nonsteroidal anti-inflammatory agents have been administered to patients on coumarin-type anticoagulants the physician should be cautious when administering Motrin to patients on anticoagulants.

A.S.A.: Animal studies show that A.S.A. given with nonsteroidal anti-inflammatory agents including Motrin yields a net decrease in anti-inflammatory activity with lowered blood levels of the non-A.S.A. drug. Single dose bioavailability studies in normal volunteers have failed to show an effect of A.S.A. on Motrin blood levels. Correlative clinical studies have not been done.

Adverse Reactions: The following adverse reactions have been noted in patients treated with Motrin (ibuprofen).

Note: Reactions listed below under Causal Relationship Unknown are those which occurred under circumstances where a causal relationship could not be established. However, in these rarely reported events, the possibility of a relationship to Motrin cannot be excluded.

Gastrointestinal: The adverse reactions most frequently seen with Motrin therapy involve the gastrointestinal system.

Incidence 3 to 9%: nausea, epigastric pain, heartburn.

Incidence 1 to 3%: diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the gastrointestinal tract (bloating or flatulence).

Incidence less than 1%: gastric or duodenal ulcer with bleeding and/or perforation, gastrointestinal hemorrhage, melena, hepatitis, jaundice, abnormal liver function (SGOT, serum bilirubin and alkaline phosphatase).

Central Nervous System

Incidence 3 to 9%: dizziness.

Incidence 1 to 3%: headache, nervousness.

Incidence less than 1%: depression, insomnia.

Causal relationship unknown: paresthesias, hallucinations, dream abnormalities.

Dermatologic

Incidence 3 to 9%: rash (including maculopapular type).

Incidence 1 to 3%: pruritus.

Incidence less than 1%: vesiculobullous eruptions, urticaria, erythema multiforme.

Causal relationship unknown: alopecia, Stevens-Johnson syndrome.

Special Senses

Incidence 1 to 3%: tinnitus.

Incidence less than 1%: amblyopia (blurred and/or diminished vision, scotomata and/or changes in colour vision). Any patient with eye complaints during Motrin therapy should have an ophthalmological examination (see PRECAUTIONS).

Causal relationship unknown: conjunctivitis, diplopia, optic neuritis.

Metabolic

Incidence 1 to 3%: decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Hematologic

Incidence less than 1%: leukopenia and decreases in hemoglobin and hematocrit.

Causal relationship unknown: hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes (e.g. purpura, epistaxis, hematuria, menorrhagia).

Cardiovascular

Incidence less than 1%: congestive heart failure in patients with marginal cardiac function, elevated blood pressure.

Causal relationship unknown: arrhythmias (sinus tachycardia, sinus bradycardia, palpitations).

Allergic

Incidence less than 1%: anaphylaxis (see CONTRAINDICATIONS).

Causal relationship unknown: fever, serum sickness, lupus erythematosus syndrome.

Endocrine

Causal relationship unknown: gynecomastia, hypoglycemic reaction.

Renal

Causal relationship unknown: decreased creatinine clearance, polyuria, azotemia.

Symptoms and Treatment of Overdosage: A nineteen month old child weighing 12 kg ingested from 2800 to 4000 mg of Motrin (ibuprofen) and presented with apnea, cyanosis and responded only to painful stimuli. Oxygen and parenteral fluids were given and at 12 hours she appeared completely recovered. Two other children (10 kg each) ingested 1200 mg of Motrin each and there were no signs of acute intoxication or late sequelae. A 19 year old male who had ingested 8000 mg of Motrin reported dizziness, and nystagmus was noted. He recovered with no reported sequelae after parenteral hydration and three days bed rest.

In cases of acute overdosage, the stomach should be emptied by vomiting or lavage, though little drug will likely be recovered if more than an hour has elapsed since ingestion. Because the drug is acidic and is excreted in the urine, it is theoretically beneficial to administer alkali and induce diuresis.

Dosage and Administration: Rheumatoid arthritis and osteoarthritis

The initial daily dosage in adults is 1200 mg divided into 3 or 4 equal doses. Depending on the therapeutic response, the dose may be adjusted downward or upward. The daily dosage should not exceed 2400 mg.

Maintenance therapy, once maximum response is obtained, will range from 800 to 1200 mg per day.

Mild to moderate pain accompanied with inflammation, dysmenorrhea 400 mg repeated as required every 4 to 6 hours. The daily dosage should not exceed 2400 mg.

Children: Due to the lack of clinical experience, ibuprofen is not indicated for use in children under 12 years of age.

Supplied: 200 mg (yellow), 300 mg (white), 400 mg (orange) sugar-coated tablets and 600 mg (peach) film-coated tablets in bottles of 100 and 1000.

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ANAESTHESIA IN DENTISTRY

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L'ANESTHÉSIE EN DENTISTERIE

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Continued on next page

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2. Canadian Standards Association. *Alginate Dental Impression Material.* Rexdale, Ontario: the Association, 1982. 22p. National Standard of Canada CAN3-Z349.6-M82. 1 copy.
3. Canadian Standards Association. *Dental Burs and Cutters — Fitting Dimensions.* Rexdale, Ontario: the Association, 1979, 11p. National Standard of Canada CAN3-Z349.2-M79. 1 copy.
4. Canadian Standards Association. *Dental Casting Gold Alloys.* Rexdale, Ontario: the Association, 1980. 10p. National Standard of Canada CAN3-Z349.5-M80. 1 copy.

NOUVEAU TITRES EN BIBLIOTHÈQUE

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5. Canadian Standards Association. *Dental Inlay Casting Wax.* Rexdale, Ontario: the Association, 1980. 13p. National standard of Canada CAN3-Z349.4-M80. 1 copy.
6. Canadian Standards Association. *Tooth Designation for Dental Purposes.* Rexdale, Ontario: the Association, 1980. 8p. National Standard of Canada CAN3-Z349.9-80. 1 copy.

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51	383.10	566.80
52	383.10	566.80
53	383.10	566.80
54	383.10	566.80
55	437.30	566.80
56	437.30	566.80
57	437.30	566.80
58	437.30	566.80
59	437.30	566.80
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L'ADC poursuit sa lutte contre l'impôt sur les primes d'assurance

L'ADC continue d'exercer des pressions pour amener le gouvernement fédéral à laisser tomber son projet de lever un impôt sur les primes d'assurance dentaire versées par l'employeur à l'avantage de ses employés.

Le Dr Donald E. Williams, président sortant de l'ADC, a présenté, le 22 septembre, un mémoire en ce sens au comité permanent des finances, du commerce et des questions économiques.

Dans son document, l'Association exprime l'avis que "les arguments que le Ministère des finances a présentés à la population canadienne sont mal fondés et le projet n'aura pas les effets escomptés par le ministre des finances qui était alors M. Allan MacEachen. En outre, comme il aura des effets négatifs sur la qualité des soins dentaires et qu'il entraînera des frais d'administration supplémentaires, inutiles et improductifs, le projet devrait être retiré simplement."

L'Association a souligné qu'en 1981, quelque cinq millions d'employés canadiens bénéficiaient d'un régime d'assurance dentaire. À ce nombre venaient s'ajouter environ sept millions de personnes à charge.

"La croissance des régimes d'assurance dentaire privés, l'étendue de leur couverture, de même que la mesure dans laquelle les employeurs sont prêts à en défrayer tous les frais indiquent bien l'importance qu'on attache aux besoins en soins dentaires non seulement pour la restauration mais aussi pour la prévention," de souligner le mémoire.

Le document porte également à l'attention du comité le fait que ces régimes d'assurance se sont étendus considérablement "tant en milieu non syndiqué que syndiqué."

Il souligne que les soins dentaires prodigués dans ces conditions ne devraient pas être considérés seulement

La pression se maintient

Après la présentation au comité permanent des finances, du commerce et des questions économiques de la Chambre des communes, l'ADC a envoyé des exemplaires de son mémoire à M. Marc Lalonde, ministre des finances, et à Mme Monique Bégin, ministre de la santé et du bien-être.

Par la même occasion, l'Association a demandé à M. Lalonde de lui ménager, dès qu'il le pourra, une rencontre avec lui-même ou un haut fonctionnaire du ministère des Finances.

Le document a aussi été envoyé à tous les députés.

Même s'ils l'ont déjà fait, tous les membres de l'ADC ont été priés d'écrire à nouveau à leurs députés respectifs pour leur rappeler leurs propres préoccupations et celles de la profession.

Entre-temps, l'ADC a envoyé à tous les dentistes du Canada un communiqué les informant du lancement des "journées du président" par le Dr William Thompson, ainsi que des vérifications faites par les représentants de Revenu Canada chez les sociétés de gestion des professions.

comme un "avantage" pour l'employé. "Ni l'employé ni l'employeur n'ont grand choix en matière de soins dentaires, à moins... d'accepter que les maladies des dents et des gencives se développent inévitablement, sans rien y faire. Les frais encourus pour veiller aux soins dentaires sont aussi essentiels à la productivité et à la réduction de l'absentéisme que les sommes dépensées pour assurer la sécurité au travail."

Le mémoire note également que "grâce aux régimes privés d'assurance dentaire, le secteur public n'a pas eu à financer entièrement les soins dentaires à même les recettes fiscales."

Imposables de toute façon

Le document souligne par ailleurs que, si le gouvernement fédéral avait surtout l'intention, dans sa proposition budgétaire de novembre 1981,

d'accroître ses recettes fiscales, les sommes versées en prestations d'assurance dentaire étaient imposables de toute façon. "Quoique déductible pour l'employé, la contribution de l'employeur à un régime privé d'assurance est sujette à l'impôt de l'assureur ou du dentiste."

Si le recours à l'assurance privée baissait considérablement, c'est la majorité des 11 500 dentistes du pays qui en souffrirait, et les besoins en personnel de soutien et en hygiénistes diminueraient eux aussi, de noter le mémoire. Il y a là une "industrie importante."

Parce que les revenus des assurances vont en grande partie au professionnel qui doit en payer l'impôt, si on considère que les dentistes se classent dans les plus hauts paliers d'imposi-

Suite à la page suivante

Le Manitoba élargit son régime dentaire pour enfants

Plus d'enfants manitobains peuvent maintenant recevoir des soins dentaires, la province ayant prolongé la durée de la Loi sur les services de santé dentaire.

La loi restera en vigueur au moins jusqu'en 1983 pour les enfants qui sont nés en 1969 et qui étaient protégés en vertu du régime. Ces enfants auront 14 ans en 1983. Le Ministère de la santé provincial a voulu qu'ils continuent à profiter des avantages attachés au régime dentaire.

Les modifications apportées à la loi touchent également les enfants nés en 1976 et maintenant âgés de six ans. À cause de la prolongation, 4 500 enfants de plus auront droit à des soins dentaires.

L'an dernier, la loi couvrait seulement les enfants nés entre 1969 et 1975, soit ceux qui avaient de sept à 13 ans.

La Loi sur les services de santé den-

taire s'applique seulement aux enfants qui habitent à la campagne et dans le nord de la province, et non à ceux de la province entière.

Environ 40 000 enfants de 30 divisions scolaires participent au régime qui a été lancé il y a cinq ans, a déclaré M. Ross McIntyre, directeur administratif de l'Association dentaire du Manitoba. Les 45 divisions scolaires de la province comptent 200 000 enfants, a-t-il fait observer.

L'ADC continue

tion, un déclin des régimes d'assurance entraînerait une perte de recette fiscale de 50 cents par dollar non perçu par le dentiste.

La qualité des soins

L'Association s'inquiète beaucoup de ce que la population canadienne ait moins accès aux services de soins dentaires. "Cela se produirait surtout chez les groupes à revenu faible ou moyen qui sont les moins aptes à assumer non seulement des impôts supplémentaires mais aussi les frais des soins dentaires."

Lorsqu'il verra, en fin de compte, la portée de la proposition du gouvernement sur son formulaire T4 au début de 1983, "le contribuable demandera de nouvelles hausses de salaire pour couvrir ce nouveau fardeau fiscal." Par ailleurs, si trop d'employés tentent de se retirer entièrement des régimes d'assurance dentaire, on compromettira alors l'existence même de l'assurance groupe, aux dépenses de ceux qui voudront continuer d'y adhérer. Ceux-ci s'exposent à voir leur prime d'assurance monter considérablement.

Le mémoire note que "si on a réduit ou éliminé, depuis le 12 novembre 1981, certaines exigences fiscales sur des avantages qui ont moins de portée

sociale, tels les rabais consentis aux employés, les cartes de voyage ou les frais d'automobile fournie par l'entreprise, aucun adoucissement ne pointe encore à l'horizon en ce qui a trait à la levée de l'impôt sur les régimes d'assurance dentaire." Il en conclut, et c'est

là la recommandation de l'Association dentaire canadienne, que, "comme la réduction des soins dentaires et la hausse du fardeau fiscal toucheront surtout les contribuables à revenu faible ou moyen, le projet devrait tout simplement être retiré."

Élargissement du régime dentaire pour adolescents en Saskatchewan

En Saskatchewan, le régime dentaire pour adolescents mis en vigueur le 1^{er} septembre 1981 a été élargi de manière à pouvoir couvrir non seulement les adolescents de 14 et 15 ans, mais aussi ceux de 16 ans. Autrement dit, environ 75 pour cent des adolescents de cet âge auront droit à des soins gratuitement.

Lors du premier anniversaire du régime, le Ministère de la santé provincial s'est dit "heureux du grand nombre d'enfants qui ont reçu des traitements complets de la part des praticiens participants, ainsi que des coûts du régime." C'est ce qu'a déclaré le Dr George Peacock, secrétaire et registraire du Collège des chirurgiens dentistes de la Saskatchewan.

"Le collège souhaite que d'autres améliorations seront apportées au ré-

gime," a poursuivi le Dr Peacock. "De plus, il espère que les praticiens dentaires fourniront des traitements à toute la population adolescente de la province. Si cette population était confiée au praticien privé, le syndrome du fauteuil vide disparaîtrait quelque peu de la province," a-t-il noté.

À l'origine, le régime dentaire pour adolescents prévoyait des traitements pour un peu plus de 50 pour cent des adolescents admissibles dans le groupe des 14-15 ans. La majorité des praticiens privés de la province ont participé au régime qui a eu "apparemment assez de succès," a observé le Dr Peacock. Les praticiens participants l'ont jugé "suffisamment acceptable."

Investiture du Dr William R. Thompson comme président de l'ADC

Le 24 septembre dernier, le Dr William R. Thompson a été investi de ses nouvelles fonctions de président de l'Association dentaire canadienne au milieu de la pompe et de l'éclat militaires dans le cadre approprié du magnifique Château Laurier, à Ottawa.

Les membres du Conseil d'administration, des conseils, des comités et des groupes de spécialistes ainsi que leurs épouses ont été accueilli à la réception qui précédait le dîner par deux gardes imperturbables portant fièrement leur uniforme et leur chapeau en peau d'ours.

Quand les invités d'honneur, y compris le nouveau président, le Dr Thompson, et le président sortant, le Dr Williams, ont pénétré dans le Salon Adam pour le dîner, ils ont été salués par une sonnerie de trompette.

Des membres de la Garde à pied du Gouverneur général ont fait les frais de la musique pendant la réception et le dîner.

Objectif communications

Passant en revue la dernière année, le Dr Donald E. Williams a déclaré: "Mes principaux efforts ont sans doute porté sur les communications, à l'intérieur et au-delà de notre association, afin d'encourager la bonne entente et le respect mutuel."

À son avis, l'ADC "a élargi ses horizons et amélioré les communications dans plusieurs domaines," ce qui comprend des contacts plus étroits avec des ministères fédéraux, avec d'autres organisations dentaires et d'hygiène publique ainsi qu'avec d'autres associations professionnelles, tant sur la scène nationale que sur la scène internationale.

Le Dr Williams a remercié les membres du Conseil d'administra-



L'événement marquant du dîner du président a été la remise, par le président sortant, le Dr Donald E. Williams (à droite), de la chaîne présidentielle au cou du nouveau président, le Dr William R. Thompson.

tion, les présidents des conseils et des comités, le directeur général et le personnel du siège social pour les services qu'ils ont rendus pendant son mandat.

Par ailleurs, il a fait un compte rendu amusant de certains problèmes qui ont surgi durant l'année. Ce sont "des choses dont on ne m'avait jamais rien dit avant que je devinsse président," a-t-il dit. Ainsi il y a eu deux incendies dans des hôtels et plusieurs fausses alertes, sans compter des tempêtes de neige pendant trois jours en janvier et le dos qu'il s'est démis dans l'Île-du-Prince-Édouard en faisant des exercices pour le renforcer.

Ensuite, il a présenté le Dr Thompson, disant qu'il était "un ami, un confident, un chef éprouvé, une personne

qui se dévoue pour améliorer la santé dentaire non seulement au Canada, mais aussi à l'étranger."

Pour sa part, le Dr Thompson a également souligné l'importance des communications dans son discours inaugural, affirmant: "Si la profession continue à être plus complètement et plus directement informée au sujet des questions actuelles, et si on lui fournit de bonnes raisons pour justifier les décisions prises, nous obtiendrons son appui ou elle nous fera des recommandations positives qui entraîneront d'autres améliorations."

C'est d'ailleurs dans ce but qu'il fixera certains jours durant l'année pour "appeler le président." Durant ces jours, tout membre de l'ADC

pourra téléphoner à l'association pour exprimer son point de vue ou pour poser des questions.

On continuera à insister sur l'importance "des relations et de l'interaction gouvernementales. C'est dans ce domaine que l'ADC peut aider le plus les associations affiliées et, partant, tous les dentistes."

Présence sur la colline parlementaire

Selon le Dr Thompson, "la présence de l'ADC sur la colline parlementaire est non seulement un avantage, mais vu le climat économique actuel, elle est absolument vitale."

"L'achalandage" qui est de prime importance dans plusieurs secteurs au Canada, "est rendu difficile à cause

de la main-d'oeuvre actuelle et du climat économique." Aussi ce sujet fera-t-il l'objet d'une attention particulière durant l'année à venir.

"J'ai confiance qu'une amélioration est en vue," a déclaré le nouveau président. "Par l'intermédiaire de son Conseil d'administration, de ses conseils et de ses comités, l'ADC fera sa part."

La profession devra, a-t-il ajouté, "créer de nouvelles raisons pour inciter un plus grand pourcentage de la population à demander des soins dentaires."

Par ailleurs, les responsabilités économiques continueront à être importantes cette année, a-t-il fait observer.

Nous devons "nous assurer que notre situation financière restera bonne."

La révision professionnelle constitue un autre sujet prioritaire, de dire le Dr Thompson. En novembre, un atelier sera tenu pour traiter cette question.

Au cours de la prochaine année, le dialogue se poursuivra avec "les organisations affiliées au sujet d'une équipe de santé," a-t-il assuré. Ainsi "seront garantis les meilleurs efforts concertés possible pour la dentisterie en tant qu'organisation."

Pour conclure, le Dr Thompson a remis au Dr Williams l'épingle du président sortant et a remercié Mme Williams "pour les efforts déployés en appuyant son époux et l'ADC."

Le Dr W.R. Thompson s'est distingué dans deux carrières

"Notre nouveau président a déjà profité de deux carrières et, dans 12 mois très courts, il fera l'expérience de l'équivalent d'une autre." C'est avec ces mots que le président sortant de l'ADC, le Dr Donald E. Williams a présenté le Dr William R. Thompson lors du dîner du président au Château Laurier, à Ottawa, le 24 septembre dernier.

Les points saillants de ces deux premières carrières sont rapportés ci-dessous.

Né à Campbellford (Ontario), le Dr Thompson a fait ses études à l'Université de Toronto, y obtenant son diplôme en 1949 et un certificat en chirurgie buccale et maxillo-faciale en 1969.

Parallèlement à sa carrière dentaire, le Dr Thompson a mené une

carrière militaire couvrant quatre décennies. Ainsi il a servi comme chef de la Division de chirurgie dentaire à la base militaire de Borden, comme officier d'état-major à la Division du service dentaire à la Direction générale de la Défense nationale, comme commandant divisionnaire à la base militaire de Trenton, et comme directeur des Services de soins dentaires. En 1976, il a été nommé directeur général des services dentaires.

Durant les six dernières années, le Dr Thompson a été membre du Conseil d'administration de l'ADC et, en 1980, il a été élu membre du Conseil exécutif.

Par ailleurs, il est membre honoraire du Collège royal des dentistes du Canada, membre du Collège international des dentistes et ancien chirurgien dentaire honoraire de la

Reine. De 1975 à 1980, il a été président de la Commission des services dentaires des Forces armées de la Fédération dentaire internationale.

En 1979, pour les services rendus à la dentisterie internationale, le Dr Thompson a reçu la médaille Pierre Fauchard de l'Ordre national des chirurgiens dentistes de France. En juin 1981, en reconnaissance de ses services méritoires et de son zèle comme membre des Forces armées, il a été nommé commandant de l'ordre du mérite militaire.

Dans ses moments de loisir, le Dr Thompson fait du jardinage, de la navigation, du ski nautique ou va se réfugier dans sa ferme près de Trenton (Ontario).

Son épouse, Doris (Hays), lui a donné trois enfants.

Le Dr Robert Hicks est élu président désigné



Le Dr Robert Hicks (à droite), président élu de l'ADC, reçoit quelques sages conseils du Dr Donald Williams, président sortant, et du Dr William R. Thompson (au centre), président.

Lors de l'assemblée annuelle du Conseil d'administration de l'ADC, à Ottawa, le 25 septembre, le Dr Robert Hicks, de Vancouver Ouest, a été nommé président désigné de l'Association dentaire canadienne.

Diplômé de l'Université de l'Alberta en 1962, le Dr Hicks a exercé la dentisterie à Vancouver Nord jusqu'en 1965. Par la suite, il s'est spécialisé en orthodontie, obtenant une maîtrise à l'Université Northwestern en 1967. Depuis cette date, il exerce l'orthodontie à Vancouver Ouest.

Membre du Conseil d'administration de l'ADC depuis 1974, le Dr Hicks agit comme président du Comité des questions fiscales depuis 1978.

Il a été président du Collège des chirurgiens dentistes de la Colombie-Britannique et président de la Société dentaire de Vancouver et du district de Vancouver. Cette année, il agit comme président de la *Cancer Control Agency* de la Colombie-Britannique.

Par ailleurs, il fait partie du Collège

international des dentistes et de l'Académie Pierre Fauchard.

Dernièrement, il était élu président de l'Association canadienne des orthodontistes.

De 1968 à 1980, il a été membre à temps partiel de la Faculté dentaire

de l'Université de la Colombie-Britannique.

Enfin, le Dr Hicks s'intéresse activement aux affaires communautaires et, depuis 1968, il fait fonction de conseiller municipal pour la ville de Vancouver Ouest.

Régime d'épargne-retraite de l'ADC

Les valeurs respectives du Régime d'épargne-retraite de l'Association Dentaire Canadienne étaient les suivantes au 30 septembre 1982.

Fonds d'actions ordinaires	\$51.7628
Fonds à revenu fixe	\$30.8289
Fonds garanti	\$24.4771
Fonds de placement	\$11.2069

L'avoir total (valeur marchande) du régime s'élevait à \$30,620,497.

Au 31 août 1982, les chiffres du mois précédent étaient les suivants:

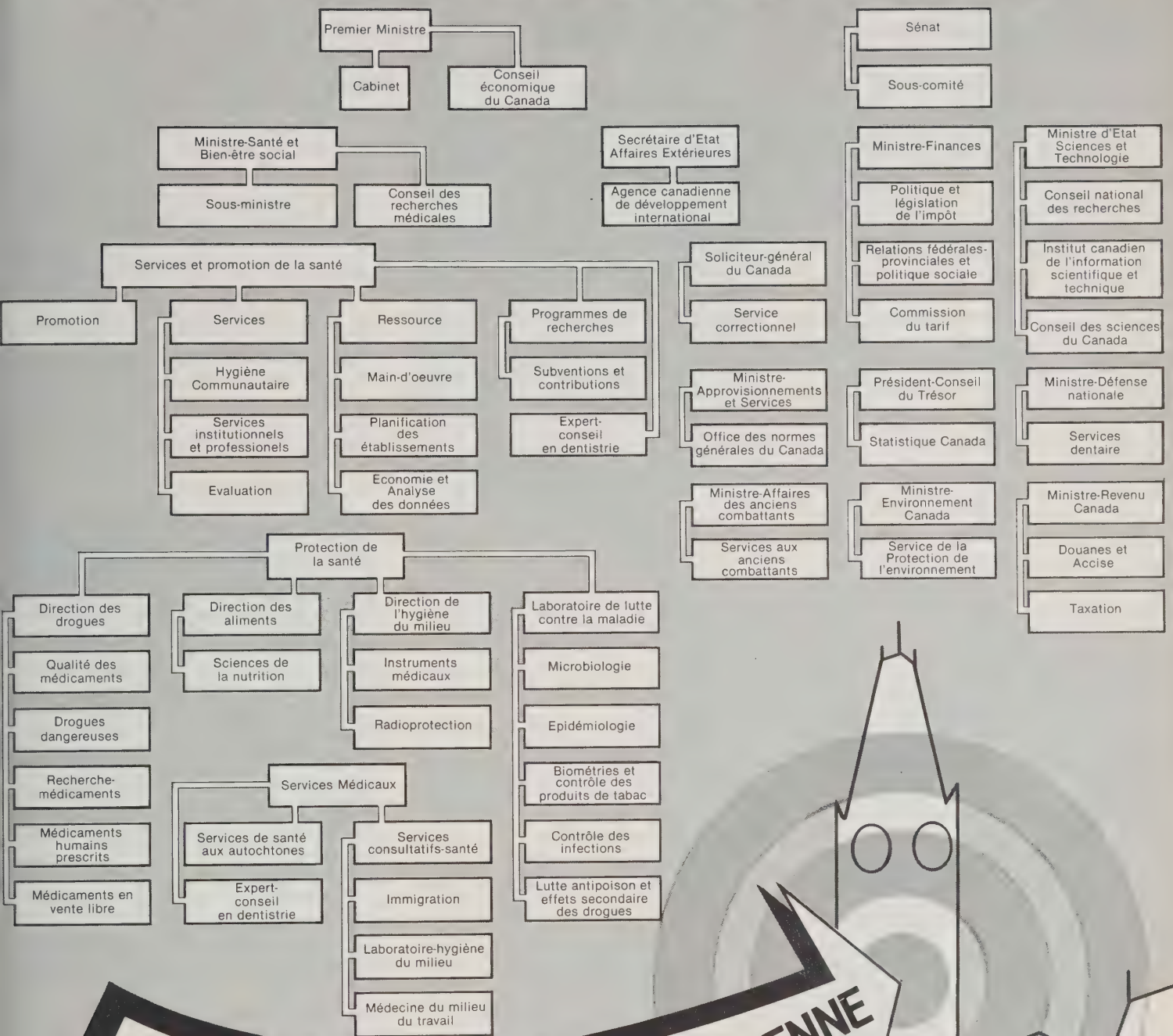
Fonds d'actions

ordinaires	\$51.1399
Fonds à revenu fixe	\$29.6552
Fonds garanti équilibré	\$24.2083
	\$11.1450

L'avoir total (valeur marchande) du régime s'élevait à \$30,453,622.

Pour de plus amples renseignements, veuillez écrire à l'adresse suivante: Canadian Dental Service Plans Inc., Ste. 600, 2 Lansing Square, Willowdale, Ontario M2J 4Z3, ou appeler le service de renseignements du CDSPI en composant 1-800-268-5418 (497-7171 pour les résidents de Toronto).

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L'Association dentaire canadienne

En bref —

Le Dr Robert David Kinniburgh, de Lethbridge (Alberta), est le nouveau président de l'Association dentaire de l'Alberta.

Il succède au Dr P.J. Kirby, d'Edmonton.

Ancien membre du Conseil d'administration de l'ADC, le Dr Kinniburgh a fréquenté l'Université Gonzaga de Spokane (Washington). En 1969, il obtenait son diplôme dentaire de l'Université Creighton, dans le Nebraska, puis il établissait son cabinet à Lethbridge.

Il a déjà été président de la Société dentaire du district de Lethbridge et a fait partie du Conseil d'administration de l'Association dentaire de l'Alberta plusieurs fois.



Le Dr Robert Kinniburgh



Le Dr David Donaldson du Département de dentisterie restaurative à l'Université de la Colombie-Britannique a reçu une bourse de recherche valant 25 000\$ de la Fondation de recherche sur les soins de santé de cette province.

Il est en train d'étudier les effets de la pollution par le protoxyde d'azote dans les cabinets dentaires ainsi que

l'efficacité des appareils de prévention actuels.

La fondation a alloué plus de 1,5 million de dollars provenant des loteries pour appuyer divers projets de recherche sur la santé. Les subventions sont accordées pour encourager les recherches cliniques et appliquées ainsi que les projets de démonstration visant à améliorer la façon d'administrer les soins de santé.



Les étudiants en dentisterie peuvent maintenant participer à trois nouveaux stages de recherche sur le cancer Terry Fox établis par l'Institut national du cancer du Canada.

Le Dr David Gardner, représentant de l'ADC auprès de l'Institut, a fait observer qu'à l'origine, les stages étaient réservés aux étudiants médicaux.

Le programme a pour but de permettre à certains étudiants en médecine et en dentisterie d'obtenir une formation touchant la méthodologie et la philosophie de recherche sur le cancer. Les stages pour étudiants dentaires peuvent se faire au Canada seulement et couvrent 14 mois consécutifs, soit deux étés et l'année universitaire qu'ils encadrent.

Chaque bourse vaut 10 000\$ versés comme suit: 4 000\$ pour chacun des deux étés et 2 000\$ pour l'année universitaire. De plus, 2 000\$ sont accordés chaque été au superviseur pour l'aider à défrayer le coût du matériel de recherche.

L'Institut national du cancer a également prévu d'autres bourses pour les étudiants dentaires compétents. Ces bourses proviendront des recettes générales de l'Institut plutôt que du marathon Terry Fox.

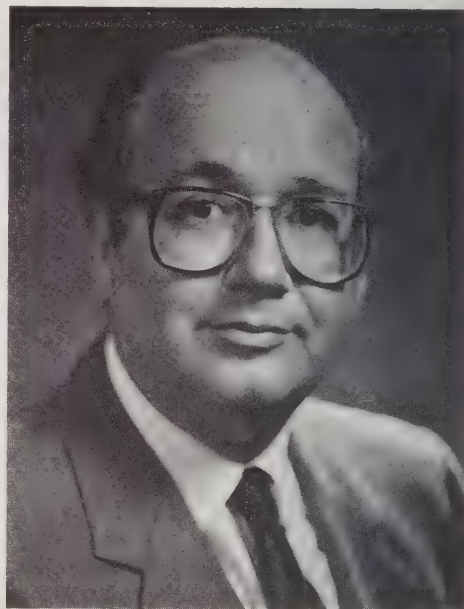


Le Dr Samuel Newman, de Toronto, a été élu président de l'Académie canadienne de parodontologie pour 1982-1983. Le Dr Allen Wainberg a été élu secrétaire-trésorier.

Originaire de Sydney (Nouvelle-Écosse), le Dr Newman a reçu son

doctorat en chirurgie dentaire de l'Université Dalhousie en 1956. Il a fait des études supérieures à l'Université de Pennsylvanie en 1961 et à l'Université de Boston en 1962. Il travaille à temps partiel au Département de parodontie de la Faculté dentaire de l'Université de Toronto ainsi qu'à la division dentaire de l'Hôpital Mount Sinai.

Quant au Dr Wainberg, il est professeur adjoint à la Division de parodontologie de la Faculté dentaire de l'Université McGill. Il fait présentement des recherches sur les rapports existant entre les défauts osseux et les traumatismes occluso-articulaires. De plus, il est examinateur pour le Collège royal des dentistes du Canada. Et pour occuper ses loisirs, il cultive des orchidées.



Le Dr Samuel Newman



Plus d'une centaine d'appareils et dispositifs médicaux et dentaires, nouveaux ou modifiés, sont lancés tous les ans sur le marché canadien. Ceux qui créent le plus de soucis à la Direction générale de la protection de la santé, au Ministère de la santé et du bien-être, sont ceux qui sont destinés à l'implantation dans les tissus ou les cavités des patients pour des périodes prolongées.

La direction générale a découvert, en 1981, que beaucoup d'implants de diverses natures entraient au Canada,

sans qu'on en vérifie de façon adéquate la sécurité et l'efficacité. Au mois d'octobre, elle diffusa une lettre circulaire dans laquelle elle demandait aux personnes intéressées leurs observations et suggestions. Elle reçut 49 réponses venant des hôpitaux, de l'industrie, des professionnels et des organisations.

La direction attendait plus de réponses. Toutefois, selon le Dr Ajit DasGupta, directeur du Bureau des appareils médicaux, elle a quand même proposé d'apporter aux règlements certaines modifications visant à freiner la promotion des appareils et dispositifs qu'elle n'a pas vérifiés.

Elle a fait les recommandations suivantes: que tous les appareils ou dispositifs destinés à être implantés dans les tissus ou cavités du corps humain pour plus de 30 jours soient assujettis aux dispositions de la partie V des règlements; que les fabricants soient autorisés à indiquer sur l'étiquetage des implants l'approbation de la direction générale.

Ces recommandations n'avaient toutefois pas encore été acceptées à la fin du mois d'août, selon le Dr DasGupta.



La situation économique actuelle ainsi que l'augmentation des effectifs dentaires ont entraîné un plus grand nombre de faillites parmi les dentistes de l'Ontario.

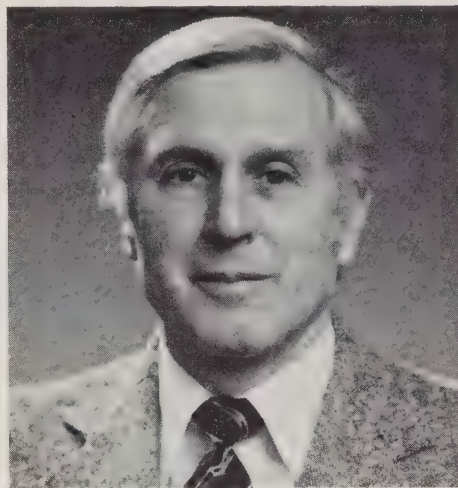
M. John Gillies, directeur administratif de l'Association dentaire de l'Ontario, a déclaré que, suivant les dernières données publiées par le bureau de l'enregistrement provincial, le nombre des faillites a augmenté au cours des deux dernières années.

Cinq dentistes ont déclaré faillite en 1980 et six en 1981, a précisé M. Gillies.

Avant 1980, le nombre moyen des faillites était de deux par année. De plus, ces faillites dépendaient généralement du fait que les dentistes en cause s'occupaient d'affaires étrangères à leur pratique.

De l'avis de M. Gillies, l'augmentation des faillites est un signe des dures

conditions économiques. Le fait qu'il y a trop de dentistes et qu'ils doivent se partager une clientèle moins nombreuse n'aide guère non plus, a-t-il ajouté.



Le Dr David A. Clarke

Le Dr David A. Clarke, de Kelowna (Colombie-Britannique), a été élu président de l'Association canadienne d'hygiène publique.

Originaire de Toronto et diplômé de l'Université de Western Ontario, le Dr Clarke est directeur médical du South Okanagan et Similkameen Health Centre de Kelowna.

Les restrictions économiques actuelles, a-t-il déclaré aux 3 000 membres de l'association, constituent "une occasion d'insister principalement sur la prévention (dans le domaine de l'hygiène publique) et d'encourager des modes de vie plus sains pour tous."

À son avis, la société doit résoudre des questions importantes comme le coût des accidents de la route (10 billions de dollars chaque année), les abus d'alcool et de drogue, la consommation de tabac et les excès de table. De plus, elle doit s'occuper des handicapés et des personnes défavorisées. "Des efforts concertés de la part du public ainsi que l'éducation des masses sont nécessaires pour résoudre ces problèmes," a-t-il dit.



Le Dr Angela Rasmussen, de Niagara Falls (Ontario), a reçu un prix du concours des "soins prothétiques

accordés aux opérés en danger" organisé par le Congrès international sur la dentisterie dans les hôpitaux.

Diplômée de l'École dentaire de Buffalo à l'Université de l'État de New York, le Dr Rasmussen a déjà reçu plusieurs récompenses, y compris le prix de l'Académie américaine des chirurgiens buccaux et maxillo-faciaux.

Elle a une pratique privée avec son mari à Tampa, en Floride.



Le Dr Norman Levine, professeur et chef du département de Pédodontie à l'Université de Toronto, a été désigné président-élu de l'Association internationale de médecine dentaire pour les handicapés, lors du sixième congrès de l'association qui a eu lieu du 20 au 25 juillet à Toronto.

Ont également été élus à l'exécutif de l'association: le Dr Haim Sarnat, d'Israel, président sortant; le Dr Erling Böhlin, de Suède, président; le Dr Peter Westphal, de Suède également, secrétaire-trésorier; le Dr Susumu Uehara, du Japon.

Le Dr Levine a aussi été élu au conseil d'administration de l'Académie de médecine dentaire pour les handicapés, dont le président est le Dr Len Smith, de Calgary. L'académie constitue l'aile nord-américaine de l'association et regroupe les membres des États-Unis et du Canada.



Le Dr Norman Levine

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La table ci-dessous présente la prime annuelle payable de 45 ans à 65 ans pour un supplément de \$ 1 000 par mois d'assurance Invalidité, d'après les tarifs donnés par le RADC et une grande compagnie d'assurance.*

Age	Prime annuelle	
	RADC	Assureur
45	\$ 300,00	\$ 566,80
46	300,00	566,80
47	300,00	566,80
48	300,00	566,80
49	300,00	566,80
50	383,10	566,80
51	383,10	566,80
52	383,10	566,80
53	383,10	566,80
54	383,10	566,80
55	437,30	566,80
56	437,30	566,80
57	437,30	566,80
58	437,30	566,80
59	437,30	566,80
60	477,40	566,80
61	477,40	566,80
62	477,40	566,80
63	477,40	566,80
64	477,40	566,80
Prime totale payée en 20 ans	\$ 7 989,00	\$ 11 336,00

Le coût n'est évidemment pas le seul élément à considérer. Mais avant de payer un supplément de cette importance, essayez de connaître les éventuels avantages que vous en tirerez.

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* Les tarifs indiqués sont ceux offerts au 1^{er} mai 1982 pour un dentiste de 45 ans demandant une indemnité mensuelle de \$ 1 000 jusqu'à 65 ans, avec une période d'attente de 30 jours. Les contrats diffèrent et les tarifs peuvent changer.



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Dentist-to-population ratios in Saskatchewan: a realistic appraisal

R.E. McDermott, DDS, MSc

R.D. Oles, DDS, MS

Saskatoon, Sask.

ABSTRACT

Dentist-to-population ratios for the Province of Saskatchewan and the two largest cities of Regina and Saskatoon have been calculated and discussed. The dramatic effects of government-operated dental programs for children and adolescents upon these ratios and upon the potential patient pool for dentists are also shown. The need for cooperative manpower planning and a change in the market sector to which future marketing efforts of the profession should be directed becomes evident.

Dentist-to-population ratios (DRP's) are a crude method of estimating manpower needs. Such indicators, however, are easy to obtain and can serve as a means of alerting the profession to developing trends. In lightly populated Saskatchewan, small changes in dental personnel numbers can cause large changes in DPR's and have a considerable impact on the profession. In this paper, various factors are discussed which have not been considered previously when dealing with dental manpower and DPR's.

DPR TRENDS

In the past five years, Saskatchewan's population growth has ranked third among Canada's provinces. Federal census data for 1981 indicate a 3.9 per cent increase since 1976 and a current population of 957,025.¹ In the same five-year period, the number of dentists in general practice has increased from 276 to 333^{2,3} (20.6 per cent increase). There are also 213 dental therapists,⁴ 45 dental hygienists,

and 55 denturists licensed to provide dental care in the province, and 503 dental assistants.³ Table I illustrates the steady increase in the number of dentists in general practice and the changes in DPR that have occurred in the past 20 years.

Paraprofessional Competition

In Saskatchewan, the DPR's shown in Table I are of little real value because they do not reflect the true supply/demand situation in which other dental health workers compete for the same patient pool. Dental therapists, also known as dental nurses, have the greatest impact. They are trained at the Wascana Institute of Applied Arts and Sciences in Regina in a two-year program that prepares them to perform basic dental services for pre-school and school-age children. The Saskatchewan Health Dental

Table I: Number of dentists and dentist-to-population ratios: selected years, 1961 — 1981

Year	Number of licensed dentists	Percentage increase	Dentist-to-population ratio
1961	189	---	1:4895
1971	221	16.9	1:4150
1976	276	24.9	1:3375
1979	310	12.3	1:3114
1980	325	4.8	1:3002
1981	333	2.5	1:2874

Continued on next page

Plan (SHDP) utilizes dental therapists to provide care in school-based clinics throughout the province. As of August 31, 1982, SHDP rotated 159 dental therapist teams throughout 505 elementary schools. The 1981 utilization rate for eligible children was 83.5 per cent; 129,669 children received dental care in SHDP clinics.⁵

On September 1, 1981, an Adolescent Dental Plan (ADP) was implemented by the provincial government. This plan provides dental care for all children enrolled in provincial secondary schools. SHDP dental clinics were established in secondary schools, with the intent of providing for 50 per cent of the enrolled adolescent population of the province. The remaining 50 per cent receive treatment in private offices; this portion of the plan is administered by the College of Dental Surgeons of Saskatchewan. Government capitation grants are made to the College, and individual practitioners bill the College on a fee-for-service basis up to the capitation limit. In Regina and Saskatoon, 70 per cent of the adolescents are allocated to SHDP clinics and 30 per cent to private practitioners.

Along with the dental therapists working in the two public plans, licensed denturists compete with dentists for patients. As of September 1981, there were 55 licensed denturists in the province, with many working in clinics located in the larger centres.³ Unlike licensed dentists, the denturists actively advertise their services.

Declining caries incidence

The potential patient treatment pool is affected by DMF* rates, which are declining throughout North America. Epidemiologic studies carried out by the National Institute of Dental Research in the U.S.A.,⁶ by the Department of Health, City of Toronto,⁷ and by the Ontario Ministry of Health⁸ show a steady decline in caries activity. While no comparable data are available for Saskatchewan, the 1980 — 1981 Annual Report of the SHDP states that the number of amalgam restorations declined from 3.49 per child in 1975 to 1.11 per child in 1981. The combined DMF-DEF rate for six-year-old children decreased from 6.5 in 1975 to 4.4 in 1981.⁵

Realistic dentist-to-population ratio

DPR's have little meaning when 129,669 children out of a total population of 957,025 are removed from the private sector patient pool. When this number is subtracted, the remaining pool is 827,356, giving an adjusted DPR of 1:2484, which means 392 fewer potential patients per practitioner.

It is too early to calculate the impact of the adolescent dental plan on the adjusted DPR, but a projection can be made of its possible effects. It was intended that SHDP clinics treat 50 per cent of the secondary school popula-

tion. Total secondary school (grades 9-12) enrolment as of September 30, 1981, was 60,753.⁹ Fifty per cent of 60,753 (30,377) subtracted from 827,356 leaves a potential patient pool of 796,979. This means a further adjusted DPR of 1:2393 and 89 fewer potential patients per private practitioner.

Government-funded and operated dental plans had removed an estimated 481 patients from the potential patient pool of each private dentist in Saskatchewan as of 1981. Calculations are summarized in Table II, which also considers the influence of actual utilization rates. It is estimated that only 48 per cent of the adult population in Canada visits a dentist in any 12-month period.^{8,10} In Table II, a projected 50 per cent dental utilization rate has been used to calculate the final adjusted DPR. When these adjustments are made, a radically different picture of dental manpower status emerges.

Regina and Saskatoon: realistic DPR's

Regina and Saskatoon have the largest populations in Saskatchewan and the most dentists. Table III presents city population, number of general dentists, number of private dental offices, number of SHDP clinics, and unadjusted DPR's.

Table II: Adjusted dentist/population ratios, Saskatchewan, 1981

	Adjusted population	Dentist/population ratio
Total population	957,025	1:2874
Minus children in SHDP (129,357)	827,350	1:2482
Minus students in ADP (30,377) estimated	790,979	1:2393
Minus projected non-attending population (50% of 796,979)	398,490	1:1193

Table III: Regina-Saskatoon unadjusted DPR's

	Population	Dentists	Dental offices	SHDP clinics	DPR
Regina	161,304	66*	42	57	1:2444
Saskatoon	152,747	71*	37	74	1:2151

*DMF — Decayed, Missing, filled permanent teeth
DEF — Decayed, Extracted, filled deciduous teeth

*Excluding 34 full-time salaried dentists and those others listed as dental specialists.

Table IV: Regina-Saskatoon adjusted DPR's

City	Regina	Saskatoon
Population	161,304	152,747
Minus children treated by SHDP	19,040	16,496
Minus adolescents treated by ADP	6,869	6,591
College of dentistry patients	---	2,800
Patients for private sector	135,395	126,410
Adjusted DPR	1:2051	1:1780

Table V: Effects of dental utilization rate on adjusted DPR

City	Regina	Saskatoon
Number of dentists	66	71
Patients for private sector	135,395	126,410
Minus projected non-attending population	67,698	63,205
Final adjusted dentist/population ratio	1:1026	1:890

Table IV summarizes the effects on the unadjusted DPR's of the basic dental plan, the adolescent plan and, for Saskatoon, the University of Saskatchewan College of Dentistry clinic program. Adjusted DPR's have been derived, taking these figures into account.

In Table V, the effect of the 50 per cent dental utilization rate is considered, and realistic adjusted DPR's for Regina and Saskatoon have been calculated. They indicate a potential patient pool per licensed practising dentist of 1,026 patients in Regina and 890 patients in Saskatoon.

CONCLUSIONS

Dental manpower in Saskatchewan has been evaluated using statistical data where available and intelligent

estimates where not. The dramatic effects of government dental plans and their influence on private practice patient pools have been emphasized and the probable 50 per cent dental utilization rate has been considered. How many patients are needed to sustain a viable fee-for-service private practice? Estimates from previous studies have ranged from 1,222 to 2,000 persons per dentist.^{11,12} As stated at the onset, it is recognized that DPR's are a crude and ineffective means of estimating dental manpower needs. However, the information they do convey can serve as a means of alerting professional, governmental and educational agencies to rapidly changing conditions. For Saskatchewan, the following conclusions are warranted:

(1) Government programs involving the paediatric and adolescent populations have changed the nature of private practice; care of the adult and geriatric sectors will have to be emphasized in the future.

(2) The profession will have to direct its marketing efforts to the 50 per cent of the population which does not now seek regular dental care.

(3) Realistic adjusted DPR's suggest that present dental manpower in Regina and Saskatoon may well exceed need and demand.

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Dr. Oles is professor, Department of Periodontics, University of Saskatchewan.

Reprint requests to Dr. McDermott.

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WARNINGS: Oxycodone can produce drug dependence of the morphine type and has the potential for being abused. Psychic dependence, physical dependence and tolerance may develop upon repeated administration, as with other oral narcotic medication. May impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as driving a car or operating machinery. Patients should be cautioned accordingly. Additive CNS depression may occur in patients receiving other narcotic analgesics, general anesthetics, monoamine oxidase inhibitors, tricyclic antidepressants, phenothiazines or other tranquilizers, sedative-hypnotics or alcohol. If combined therapy is contemplated, the dose of one or more of the agents should be reduced. Safe use in pregnancy has not been established relative to possible adverse effects on fetal development, therefore Percocet or Percocet-Demi should not be used in pregnant women unless, in the judgment of the physician, the potential benefits outweigh the possible hazards. The administration of Percocet or Percocet-Demi to obstetrical patients in labor may be associated with respiratory depression of the newborn. Percocet should not be administered to infants or children, although Percocet-Demi may be considered for children of six years or older.

PRECAUTIONS: The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of **head injury**, other intracranial lesions or a pre-existing elevated intracranial pressure. The diagnosis or clinical course in patients with **head injuries** or with **acute abdominal conditions** may be obscured by narcotic drugs. Give cautiously to **elderly or debilitated** patients due to the risk of cardiac or respiratory depression, as well as to patients with hemorrhage, severe impairment of hepatic, respiratory or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture. Narcotic analgesics should only be employed for the treatment of **headaches** when no other treatment is effective, in order to minimize risk of psychological and physical dependence.

ADVERSE REACTIONS: Light-headedness, dizziness, sedation, nausea and vomiting may occur, as well as euphoria, dysphoria, constipation and pruritus.

DRUG INTERACTIONS: May be additive with other CNS depressants.

MANAGEMENT OF OVERDOSAGE: Signs and symptoms: Respiratory depression, extreme somnolence progressing to stupor or coma, skeletal muscle flaccidity, cold and clammy skin, and sometimes bradycardia and hypotension. In severe cases, apnea, circulatory collapse, cardiac arrest and death may occur. Acute acetaminophen intoxication is characterized by anorexia, nausea, vomiting and sweating within two or three hours of ingestion, and possibly cyanosis with methemoglobinemia, enlargement and tenderness of liver, accompanied by abnormally high liver function tests, occur within 48 hours, followed by jaundice, coagulation defects, myocardiopathy, encephalopathy, renal failure and death due to hepatic necrosis. A dose of 10 g of acetaminophen is intoxicating, possibly fatal in excess of 15 g. Hepatic toxicity occurs when the plasma levels reach 300 µg/ml within four hours of ingestion. **Treatment:** Re-establish adequate respiratory exchange. Naloxone, nalorphine or levallorphan are specific antidotes against narcotic-induced respiratory depression. An appropriate dose of antagonist should be administered preferably intravenously, and repeated as needed to maintain adequate respiration; the patient should be kept under continued surveillance. Instructions in the package insert provided by the manufacturer should be carefully followed. Do not administer an antagonist in the absence of clinically significant respiratory or cardiovascular depression. Employ oxygen, intravenous fluids, vasopressors and other supportive measures as indicated. Gastric emptying by emesis or lavage may be helpful. Hemodialysis carried out within ten hours of ingestion may be of some value. Plasma levels of acetaminophen should be determined.

DOSAGE AND ADMINISTRATION: Percocet Tablets: Usual adult dose is one tablet every six hours as needed for pain.

Percocet-Demi Tablets: Usual adult dose is one or two tablets every six hours. Children twelve years and older: half a tablet every six hours. Children six to twelve years: a quarter of a tablet every six hours. Not indicated for children under six years of age. Dosage should be adjusted according to the severity of the pain and the patient's response.

DOSAGE FORMS: Percocet Tablets: Bottles of 40, 100 and 500 white, scored tablets, each containing oxycodone hydrochloride 4.5 mg, oxycodone terephthalate 0.38 mg, acetaminophen 325 mg, caffeine 32 mg.

Percocet-Demi Tablets: Bottles of 40, 100 and 500 blue quadrisectioned tablets, each containing oxycodone hydrochloride 2.25 mg, oxycodone terephthalate 0.19 mg acetaminophen 325 mg, caffeine 32 mg.

Complete prescribing information available on request.

Reference

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Dental Technology: Theory and Practice

Richard W. Blakeslee,
Robert P. Renner
and Alexander Shiu

C.V. Mosby Co., 1980
\$29.95, 365 pages

This textbook was written primarily for dental technology students and does a very good job serving that purpose. Its stepwise presentation, scope and good indexing makes it very easy to find your way into the text. Therefore, it is a useful reference for technicians, dental students and dentists; it would also be a useful refresher for dentists.

The main subject matter deals with the laboratory technology for removable prosthetics and crown and bridge. There are also good chapters on partials and denture repairs. The very brief chapter on orthodontic and pedodontic appliances seems a bit tacked on. Those subject areas are supported by brief but informative chapters on history of dental technology, relevant dental terminology, an illustrated chapter on laboratory equipment, dental materials and dental anatomy.

One might criticize the text because it is not comprehensive of all prosthetic approaches or is not of sufficient scientific depth. However, technical procedures for commonly accepted prosthetic procedures are well handled, and there are rationale and scientific explanations suitable for students. The additional reading or refer-

ences at the end of chapters are rather minimal.

The text presentation is excellent. It was given to a technician trainee, a certified technician and a prosthodontist for their comments. All found it very well organized, easy to read and informative. The book is richly illustrated

with pictures and drawings. It emphasizes the important aspect of communication between dentist and technician.

It is very useful text for both technicians and dentists.

This book was reviewed by Dr. Daniel Gau, Edmonton, Alberta.

Handbook of Clinical Endodontics

Richard Bence,
(Second Edition)

C.V. Mosby Company
St. Louis, Missouri
\$21.75, 262 pages.

Rather than beginning the text with an introduction, the author starts with an open letter to the reader in which he summarises his purpose in writing the handbook, that is, "to provide a simplified yet comprehensive and up-to-date clinical aid for dentists and dental students who are expected to diagnose and treat endodontic problems." For the next 262 pages he accomplishes just that.

The author has placed emphasis on the clinical applications of the three basic phases of endodontics: diagnosis, canal preparation, and canal filling while still devoting separate chapters to common endodontic entities such as radiography in endodontics, anesthesia, treatment of endodontic emergencies and traumatic injuries, endodontic surgery, bleaching, and restoration of endodontically treated teeth.

The book is bound with a spiral binding, allowing it to sit flat on a laboratory bench and therefore

making it an easily used text for students, both in their pre-clinical and clinical endodontic endeavours.

The text is replete with simple, easily understood and well-done line drawings, and accompanied by clear photographs when needed for further clarification.

The individual chapters are divided into subsections with large bold print delineating each section. This allows for not only easy reading when initially perusing the text, but also for quick reference in the future.

The material is presented in logical sequence with very little superfluous verbiage and excellent use of point-form.

If there is a shortcoming, it may be in the lack of detail as to background material. However, the author points out that the text was written to accompany Dr. Franklin Weine's text "Endodontic Therapy", where the reader may refer for additional information.

Each chapter ends with a series of questions and answers which nicely summarizes the material.

The book is well written, meets the author's objectives and is highly recommended for both students and practitioners.

This book was reviewed by Barry H. Korzen, DDS, Head of Endodontics, University of Toronto.

Oral and Maxillofacial Surgery (Volume 1)

Daniel M. Laskin

*C.V. Mosby Company
St. Louis, Missouri
\$72.50, 736 pages*

This 736 page book, Volume 1, was written for oral-maxillofacial surgeons and general practitioners. It is written in such a manner that each subject is developed from its beginning, in sequence, to the more advanced stages of today. Each chapter has a discussion, with practical application relative to problems for the oral-maxillofacial surgeon and general practitioner.

Volume 1 is composed of four parts, dealing with basic biomedical and clinical aspects of surgical practice.

Part 1 deals with biomedical and biological sciences such as surgical anatomy, surgical embryology, post-natal cranial facial growth and development, microbiology, pharmacology, immunobiology.

Part 2 discusses principles of oral and maxillofacial surgery. The chapters delve into general principles and techniques, biomaterials, general care of the surgical patient, sterilization and asepsis, and prevention and treatment of medical emergencies.

The chapter on general care of the surgical patient discusses briefly pre-operative evaluation of the renal, cardiac, and pulmonary status. It discusses problems such as diabetes, patients on anticoagulant therapy, patients susceptible to endocarditis, coronary artery occlusion, patients on steroids, general pre-operative preparations, maintenance of fluid electrolyte and acid base balance, acid base problems, post-operative care and complications. This is an excellent synopsis which should be reviewed periodically.

The chapter on prevention and treatment of medical emergencies elaborates on necessary emergency drugs and equipment which should be in an office surgery. Problems which may develop and their recognition and treatment are discussed. Some of the problems mentioned are allergic reactions, syncope, airway obstructions by foreign bodies, asthma and bronchospasm, hypertensive and hypotensive emergencies, ischemic heart disease, congestive heart failure, cardiopulmonary arrest, diabetic emergencies and epileptic seizures.

Part 3 deals with examination and diagnosis. These chapters discuss such subjects as clinical history, physical examination, radiographic examination, clinical laboratory diagnosis, radionuclide diagnosis, oral manifestations of systemic disease and implications of systemic disease in the surgical patient.

The chapter on radiographic examination reviews all radiographic techniques of the facial bones, and includes pictures of the radiographs and labelled drawings for comparison. Tomography, radiopaque media, localization techniques and xeroradiography are detailed.

Clinical laboratory diagnosis reviews haematology, coagulation tests, blood chemistry, serum electrolytes, blood gases, urinalysis, fecal examination, liver function tests and thyroid leads.

The chapters on oral manifestations of systemic disease and implications of systemic disease in the surgical patient discuss diseases causing oral manifestations. A review of the systems is discussed with evaluations of each in an attempt to determine what effect the diseases may have on the patient when maxillofacial surgery is performed. The systems and diseases discussed are the respi-

ratory system, cardiovascular system, gastrointestinal system, genitourinary system, haemopoietic system, neurologic system, endocrine diseases and immunologic diseases.

Part 4 Control of pain and anxiety, contains chapters on the psychological aspect of pain and anxiety, local anesthesia, conscious sedation and general anesthesia.

General anesthesia begins with a brief history. It discusses the development of drugs and the techniques of administration, physiological consideration, ambulatory anesthesia, patient evaluation for general anesthesia, post anesthetic management, precautions, recognition, and treatment of complications and emergencies.

This is an excellent text which contributes new advances in research. It deals with practical applications of many problems encountered both in the office and hospital.

This excellent text explains new advances in research. There are so many different topics discussed, which are essential to the practice of oral maxillofacial surgery, that the book can easily be used as a splendid reference text.

This book was reviewed by John M. Armitage, DDS, FRCD(C), Hamilton, Ontario.

Erratum

In reference to the book review on "Temporo-Mandibular Joint Function and Dysfunction," which appeared on these pages in the August edition of the Journal, we regret that the co-authors' names appeared erroneously as "George A. Jack and Gunnar E. Carlsson." The first name should have read: George A. Zarb. Our apologies to Dr. Zarb for this misprint.

Nasolabial cyst: report of case

Richard A. Smith, DDS
Robert N. Katibah, BS
Phillip Merrell, DDS
San Francisco, Calif.

ABSTRACT

Dental professionals are often the first to notice a subtle facial swelling such as that produced by a nasolabial cyst. Presenting signs are remarkably constant, and therefore diagnosis of this uncommon cyst is rarely a problem. A case report of a nasolabial cyst is presented, followed by a discussion of general characteristics and current etiologic theories.

REPORT OF A CASE

A 65-year-old, healthy Asian woman was seen in the Oral Surgery Clinic at the University of California, San Francisco School of Dentistry. The patient's chief complaint was of a swelling next to her nose which was occasionally painful. Sometimes a foul whitish fluid drained intranasally and subsequently into the oral cavity via the nasopharynx. She was unsure of the growth rate but reported the swelling had been there for at least one year.

Examination

Clinical examination showed a subtle fullness to the

right alar region and lip, partially obliterating the nasolabial sulcus (**Fig. 1**). The mucosa of the right nasal aperture was raised and erythematous. The intraoral examination revealed a semi-firm swelling in the depth of the right maxillary labial vestibule. The teeth subjacent to the swelling were vital and not sensitive to percussion. The oral mucosa over the lesion was normal in appearance, and periapical radiographs of the region showed no osseous changes. The tentative diagnosis at this time was a nasolabial cyst, although other entities such as other cysts, an infectious process or neoplasia, needed to be ruled out.

Treatment

Under local anaesthesia, a 2-cm horizontal incision was made in the oral mucosa above the regional teeth (**Fig. 2**). Purulent exudate drained from the lesion several times during the operation, leading to a partial decompression. At first the mass was readily separated from periosteum, but the procedure became more difficult because the mass was tenaciously attached to the mucosa of the nasal floor. Finally the lesion was separated with sharp dissection and electrosurgery, leaving a 2-mm oronasal communication

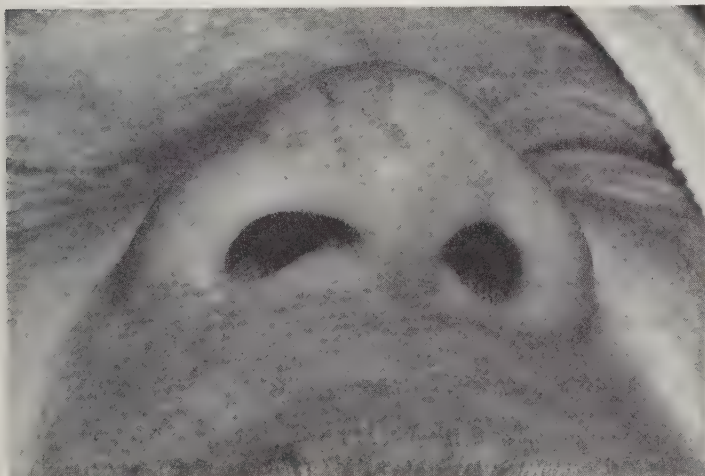


Fig. 1 — Fullness to the right alar region and lip, partially obliterating the nasolabial sulcus.

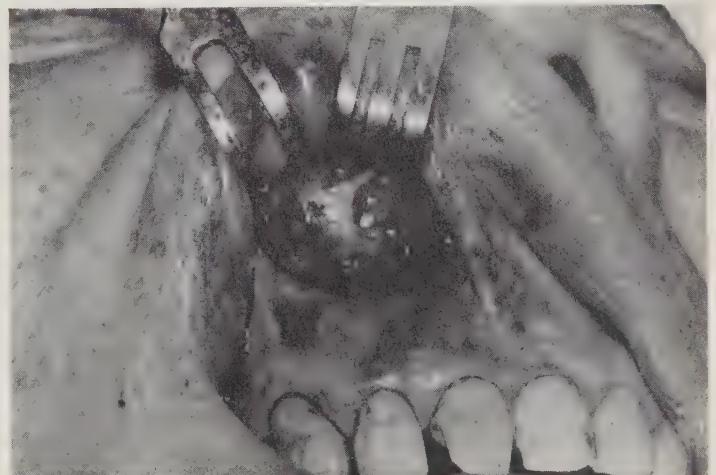


Fig. 2 — Mass visualized after horizontal incision.

which was repaired with 4-0 polyglycolic suture. Excision of the mass had left a smooth concave defect in the cortex of the labial alveolar bone. The roots of the maxillary right cuspid, lateral and central incisors were soundly encased in periapical bone and were not exposed. An iodoform gauze drain with Polysporin® was placed in the defect, and the surgical site was closed with 4-0 polyglycolic suture.

The patient was seen on follow-up visits and healing progressed uneventfully.

Pathology

The formalin-fixed specimen consisted of a sac-like mass of soft tissue measuring 1.8 × 1.3 × 1.2 cm. The wall of the sac varied in thickness and the lumen was empty. The specimen was grayish-tan to brown and had fragments of muscle attached to the outer surface. It was sectioned once, and all tissue was embedded in paraffin. Microscopic sections were stained with hematoxylin and eosin.

Microscopic examination revealed a thick-walled cystic structure with an empty lumen. The luminal surface consisted predominately of a thick layer of subacutely inflamed granulation tissue that was lined in some areas by fragmented strips of pseudostratified ciliated columnar epithelium with mucous-filled goblet cells (**Fig. 3**). The outer layers of the cyst wall consisted of an admixture of mature collagenous connective tissue and striated muscle, with moderate to intense chronic inflammation including large collections of foamy lipid-laden macrophages.

The histopathologic features were consistent with the diagnosis of nasolabial cyst with secondary infection and chronic inflammation.

Discussion

Over the years, many names have been assigned to this lesion, including Klestadt's cyst, congenital fibroepithelial cyst, muroid cyst of the nose, nasal vestibular cyst, nasoglobular cyst, nasoalveolar cyst and nasolabial cyst.^{1,2} While the latter two are the most widely used at present, nasolabial would seem to be the better term since the lesion involves alveolar bone only secondarily.



Fig. 3 — Cystic lesion lined in some areas by fragmented strips of pseudostratified ciliated columnar epithelium with mucous filled goblet cells. (Mag. 40X) (Hematoxylin and eosin stain)

The presenting signs of a nasolabial cyst are so uniformly constant that at least one group of investigators has stated, "... it readily lends itself to a spot diagnosis."³ Such signs include flaring of the alar base, fullness of the upper lip, diminished nasolabial sulcus, raised nasal floor, and intraoral swelling in the depth of the maxillary labial vestibule.³⁻⁸ When palpated intraorally, the cyst may feel soft, fluctuant or semi-firm.^{1,9,10}

The cyst is usually asymptomatic unless secondarily infected, in which case pain will probably be present until a communication is established with the nasal floor.^{3,11} Indeed, an infected nasolabial cyst may present as repeated furuncles of the nasal floor.^{1,11} In our case, the history of intranasal drainage suggested that a nasal communication existed at times. The pain, purulent exudate and microscopic inflammation are all consistent with secondary infection. Other symptoms include difficulty in breathing due to nasal obstruction on the affected side,^{3,4} and difficulty in wearing maxillary dentures.^{1,4}

Nasolabial cysts are usually unilateral but bilateral cases have been reported.^{3,5,12-15} It has been estimated that approximately 10 per cent of cases are bilateral.^{1,4} Other significant findings include a greater incidence in females, and an average onset in the fourth decade.^{1,3,9} A case in a four-month-old infant has been reported.⁸

Regional radiographs are negative unless extensive erosion of bone has taken place.^{5,7,11} After aspiration and replacement with an equal volume of radiopaque dye, radiographic visualization is possible. However, the aspirated fluid is of no real diagnostic value, and the procedure may increase the chance of infection.¹¹

The frequency of this lesion has not been established. Some investigators describe it as rare.^{15,16} Bhaskar¹⁷ has estimated it accounts for only 2.5 per cent of nonodontogenic and pseudocysts of the jaw. Other workers feel it is more common than the literature suggests, due to misdiagnosis or unrecognition.^{9,11,18,19} Renard and Morgan⁴ report about 156 cases in the world literature as of 1976.

The surgeon can expect the fibrous capsule of the cyst to shell out readily with blunt dissection until the nasal mucosa is reached. Nasal perforation is common, but healing is usually uneventful,^{1,3} and there is no tendency for this cyst to recur.^{1,3} Although this is a soft tissue lesion, the buccal plate may have been secondarily eroded quite extensively.^{1,5,8,11}

This lesion should not be confused with a dental abscess, since regional teeth are vital unless consumed by some unrelated pathologic process.⁵

Etiology

Since Zuckerkandl reported the first case of nasolabial cyst in 1882, two main etiological theories have been advanced. One holds that the lesion arises from trapped nasolacrimal duct tissue; the other contends that it is an embryonic fissural cyst.^{3,5,6,9,11}

The typical histologic picture of respiratory epithelium

led Brüggemann²⁰ in 1920 to suggest that the lesion originates from some primitive ductal structure such as the nasolacrimal duct. Streeter²¹ has shown proliferation of nasolacrimal duct tissue in proximity to the nasal floor, although other workers were unable to find such evidence.^{19,22,23}

In 1913 Klestadt²² proposed that fusion of the nasolateral, nasomedial, and maxillary process can enslave ectoderm, leading later in life to nasolabial cyst formation. However, in his studies of embryos, Klestadt was never able to find entrapped epithelium around these facial processes.⁴

Christ²⁴ has suggested that, based upon present knowledge of growth and development, fissural entrapment is no longer a valid theory. Current thinking indicates there is no epithelial entrapment between embryonic processes in the entire nasomaxillary complex, with the sole exception of midline fusion of the palatal shelves.^{21,25}

Renard and Morgan⁴ have proposed a mechanism whereby midline epithelial entrapment could lead to unilateral and bilateral cysts in the nasolabial area. Their theory is based on three vectors of cell proliferation:

Vector 1 — An anterior vector caused by mesodermal fusion of medial facial structures proceeding from posterior to anterior.

Vector 2 — Two medially directed vectors due to palatal fusion.

Vector 3 — A posterosuperior vector due to proliferation of nasal crest cells. Enlow²⁶ has shown that the entire craniofacial complex continues to grow anteroinferiorly after birth, due to an overall posterosuperior growth of cells.

Renard and Morgan⁴ assert that nasal crest cells are subject to the same posterosuperior growth. What they propose is that epithelium is trapped by Vector 2 and pushed anteriorly by Vector 1 into a wedge of oncoming nasal crest cells (Vector 3). As a result, the trapped epithelium is deflected, along the path of least resistance, into the nasolabial area via the nasal cavities. Since the nasal septum is seldom truly a midline structure, the cells will be deflected unilaterally; if evenly divided, a bilateral case would result.

SUMMARY

A case of nasolabial cyst is presented. Findings will usually include an asymptomatic fullness to the nasolabial area. Pain may be intermittent if the cyst is secondarily infected. The cyst is usually unilateral, and occurs most often in the fourth decade. For unknown reasons, there is a higher incidence in women. Radiographic findings are usually negative. Treatment consists of complete surgical removal. Although nasal perforations commonly occur from excision, healing is uneventful with no recurrence expected.

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¹Journal of Endo., Vol. 2, No. 7, July 1976, p. 215.

²Oral Surgery, Oral Medicine, Oral Pathology, Vol. 38, No. 3, Sept. 1974, pp. 469-473.

Indications for removal of the mandibular impacted third molar

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S. Taicher, DMD
Jerusalem, Israel

Frequently patients and dentists question the necessity of removing asymptomatic impacted third molars. If a patient does not suffer any subjective symptoms, he may object to the removal of an asymptomatic tooth. The deeply impacted third molar often causes no clinical symptoms during early stages of the onset of pathology. However, some of the problems which may result are the following:

1. Pericoronitis — This occurs when a communication forms between the tooth and the oral cavity, resulting in an infection, or from the traumatic effect of opposing tooth cusps. The distinct clinical symptoms are pain, trismus, swelling and dysphagia. The older patient who avoided surgery earlier in life may experience symptoms because of pressure of a denture on a soft impacted tooth or on a partially erupted tooth. Those patients who have to undergo surgery are at a medical disadvantage as compared to younger patients. In addition to age atrophy of the jaws, many factors serve to lower the systemic health status of these individuals, such as chronic disease.

2. Caries — Partial eruption of a third molar is a favourable situation for entrapment of food. This is not a self-cleansing area and promotes the development of caries on the exposed surface of the third molar, the distal aspect of the adjacent root — or both. When a carious lesion is initiated on the root surface of the adjacent tooth, it usually extends rapidly to the pulp of the distal root, causing acute pain (**Fig. 1**). Due to inaccessibility, caries is often difficult to treat in this location and often leads to a decision to remove both the third molar and the adjacent tooth.

3. Periodontal Conditions — The partially impacted third molar frequently gives rise not only to caries, but to a periodontal pocket at the distal aspect of the second molar. Removal of the impacted tooth also requires thorough curettage to remove the inflammatory granulation tissue in this area. If the impacted third molar is not removed, the periodontal pocket can progress even further, causing a retrograde pulpitis in the adjacent tooth and loss of bone support (**Fig. 2**).

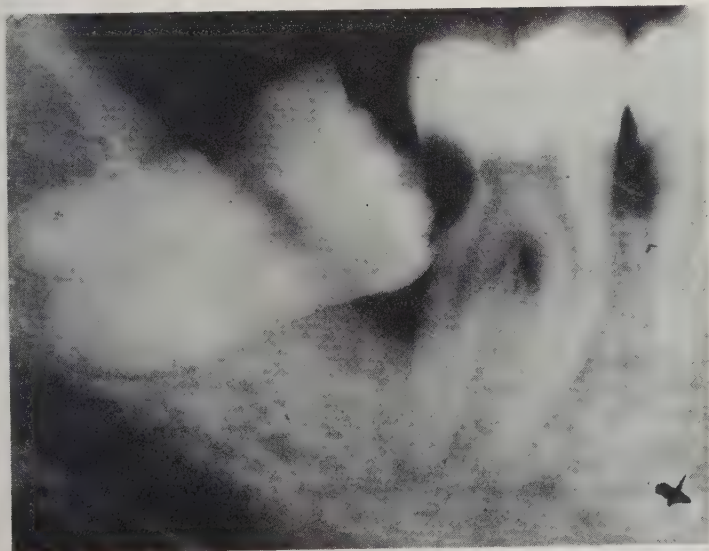


Fig 1 Caries developing in the distal coronal — root portion of the second molar.

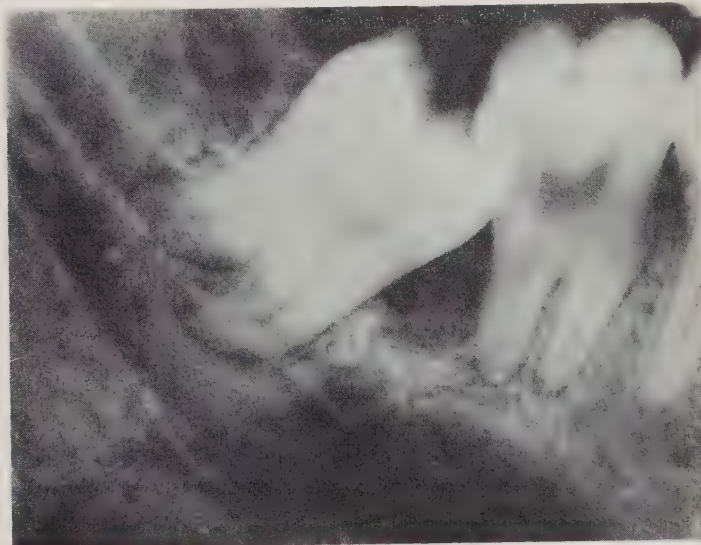


Fig 2 Periodontal pocket developing below the crown of the mesio-angular impacted third molar and the distal root of the erupted second molar.

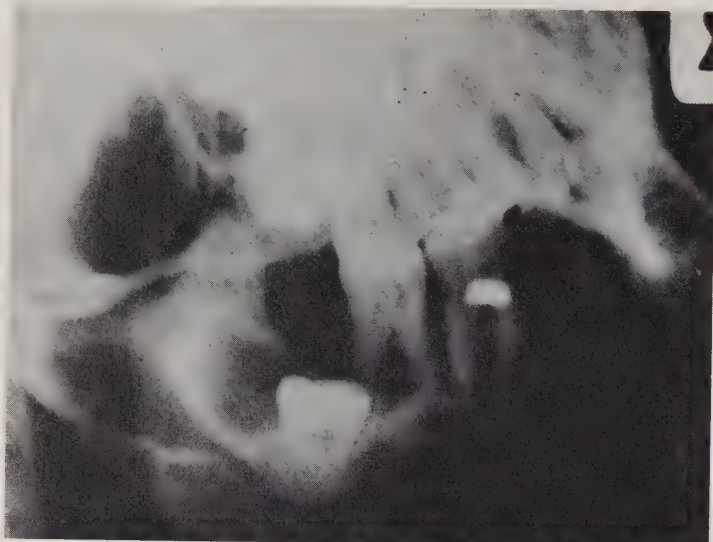


Fig 3 A dentigerous keratocyst arising from the crown of an impacted mandibular third molar.

4. Dentigerous Cyst — A dentigerous cyst may develop in association with the impeded eruption of an impacted tooth. Since the lower third molar is the most frequently impacted tooth, a cyst most commonly develops in this site (Fig. 3).

The central dentigerous cyst is the most common form of follicular cyst¹ and is potentially capable of becoming the most aggressive of all the odontogenic cysts. It may cause asymmetry, extreme displacement of the associated impacted tooth or root resorption in the adjacent tooth.^{1,2} Brannon³ stated in his study of 312 odontogenic keratocysts that 157 were originally diagnosed as dentigerous cysts. The most common sites were the mandibular third molar region and the ramus of the mandible. The keratocyst exhibits a more troublesome pattern of clinical behaviour than other cysts.⁴⁻⁶

The literature adequately documents the development of ameloblastomatous growths in follicular and dentigerous cysts.⁷⁻¹¹ Since monocystic ameloblastomas occurring in the coronal region may resemble dentigerous cysts



Fig 4 An ameloblastoma developing in the mandible where an impacted third molar was removed.

radiographically (Fig. 4),¹³⁻¹⁵ it is advisable to also confirm the diagnosis histologically.

Because of these possible pathological complications, the impacted tooth together with the entire cyst should be removed in toto. The healed cystic area should be checked by radiographic examination at frequent intervals until the bone has completely healed.

5. Coronal Resorption of Impacted Teeth — Impacted teeth may undergo resorption in the coronal part (Fig. 5a and 5b). Since the reason for resorption is seldom clearly defined, this phenomenon cannot always be understood. The few research studies which were done early in this century^{16,19} reported that the dental structure destroyed by resorption was invariably replaced by bone. Stafne and Austin¹⁹ reported that of 300 impacted teeth which had undergone resorption in the coronal part, 80 per cent were completely embedded in bone. Chevallier²⁰ found that 21 of 226 impacted maxillary cuspids exhibited coronal resorption. In a recently reported survey on impacted

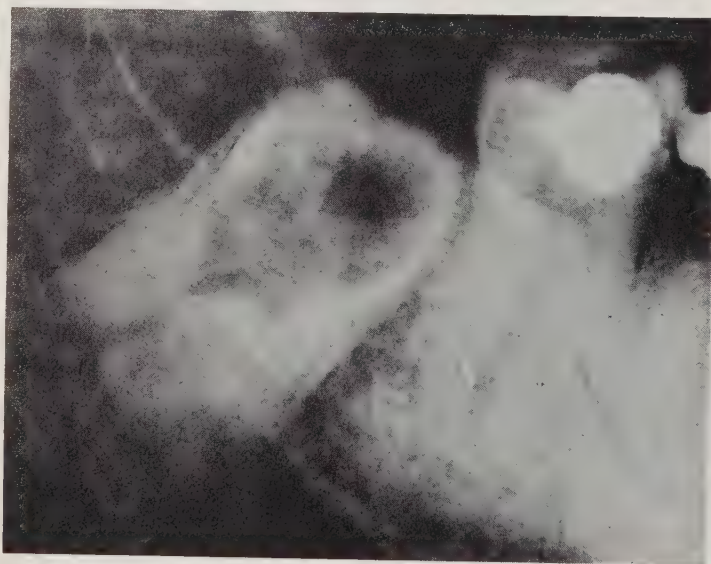
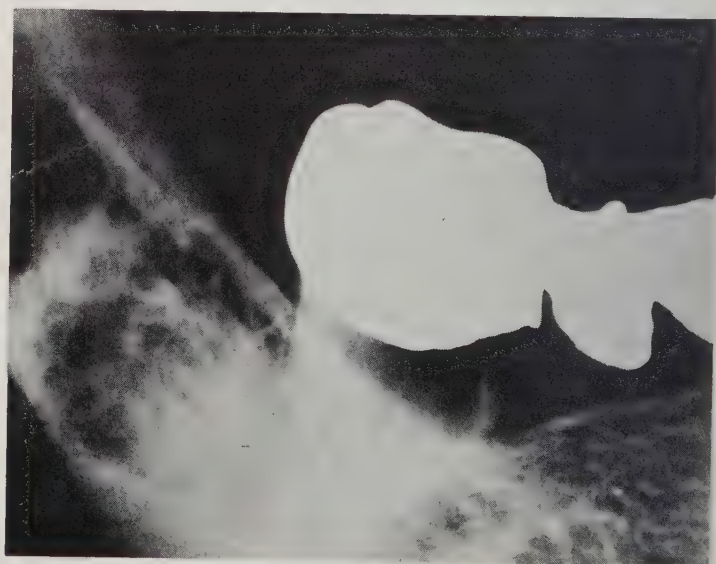


Fig 5a and b: impacted third molars with resorption of the crown.



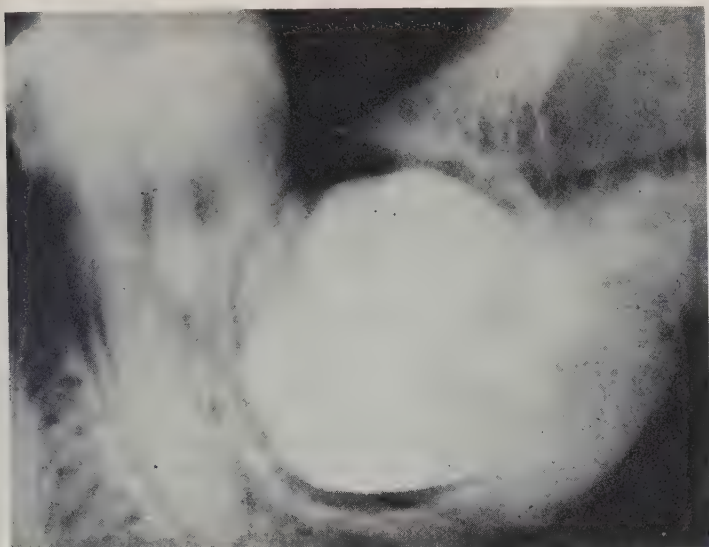


Fig 6a Radiograph illustrating resorption of distal root of the mandibular second molar due to the crown of the horizontally impacted mandibular third molar.



Fig 6b Second and third molars removed. Resorption on distal root of the second molar is evident.

maxillary cuspids, among 253 impactions, 36 were found with coronal resorption.²¹ The incidence of resorption seems to be highest in the later decades of life.^{19,21} Some authors question the finding of Stafne and Austin, since 80 per cent of their coronal resorption occurred in teeth that were completely impacted and protected from the outer environment.

Azaz and Shteyer,²¹ for example, found that 86 per cent of their coronal resorption was involved with local inflammatory change; although those teeth seemed to be clinically lacking a connection with the oral environment, in actuality they did have such a relationship. Undoubtedly the difficult surgical removal of coronal resorbed teeth is due to the incursion of bone into the crown.

6. Root Resorption — On some occasions, horizontal and mesioangular impacted third molars may cause resorption of the distal root of the adjacent molar^{13,22,23} (Fig. 6a and 6b). It is commonly believed that the connective tissue intervening between the impacted tooth and the adjacent root is stimulated and that osteoclasts form and resorption begins.² Root resorption which is caused by a dentigerous cyst may very well be the result of pressure exerted by the cyst.

Harris²⁴ has proposed a concept which may shed light on these problems. He believes that dental cysts and tumors occurring within bone are dependent on the synthesis and release of a potent bone resorbing factor. He also showed that vital explants of dental cyst material in bone tissue culture caused marked bone resorption. If dental cysts do indeed release a bone resorbing factor, then it may be assumed that this factor may also cause root resorption.

Usually the resorption of the root does not affect the vitality of the tooth.²² However, an offensive resorption process may involve the pulp of the tooth or may become contaminated by the presence of a periodontal pocket. If

the resorption in the adjacent molar is discovered early, before pain or infection set in, it is possible to save that tooth by removing the impacted tooth only.

7. Fracture of the Mandibular Angle — The region at the mandibular angle is a frequent location of fractures. Impacted third molars add further weakness to this region in the event the mandible is subjected to sudden trauma, such as from a blow (Fig. 7) or excessive extraction force. Mandibular fracture in the tooth-bearing areas usually can be controlled by simple intermaxillary fixation methods. A mandibular angle fracture presents a more difficult problem, since the proximal fragment has no teeth to assist in fixation. Due to the pull of the elevator muscles, the ascending ramus of the mandible tends to be displaced upwards and medially. If displacement occurs, the impacted tooth must be removed and direct wiring of the fractured bone should be affected.



Fig 7 Fracture of the angle of the mandible extending through the roots of the mesioangular impacted third molar as a consequence of a blow to the jaw during a fight.

8. Orthodontic Condition — Removal of an impacted third molar becomes indicated, particularly when disparity exists between the size of the teeth and the size of the jaw. Some clinicians believe that mesioangular or horizontally impacted mandibular third molars may exert mesial pressure on the dental arch and cause anterior crowding or may cause relapse in previously corrected cases. Although this observation is controversial, removal of non-functional impacted third molars may also facilitate orthodontic distalization of the distal dental segments.

9. Before Travelling — In this modern age of individual mobility, jet airplane travel is the accepted and fundamental mode of travelling abroad. It is prudent to advise potential travellers with impacted third molars that are suspected of causing clinical symptoms to have these molars removed, with an adequate healing interval before undertaking their journey, in order to avoid possible complications while abroad.

Most of the clinical and non-clinical indications for the removal of lower impacted or semi-impacted third molars are also applicable to the upper third molars. It should be emphasized that the removal of the third molars must continue to be a matter of clinical judgment of each individual surgeon.

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Correction of maxillary midface deformity and mandibular excess

D.S. Precious, DDS, MSc, FRCD(C),
G.M. Jensen, DDS, MS, FRCD(C)
M.D. Harper, DDS

Correction of deficiency of the middle face eluded surgeons until 1950, when Gillies and Harrison¹ published an account of surgical advancement of a retruded malar-maxillary complex in a case of oxycephaly. No further significant progress was made until 1967, when Tessier² published his now-famous paper which describes the subcranial LeFort III osteotomy. He also reported in a series of papers in 1971³ detailed surgical methods for correction of cranio-facial dysostosis and faciostenosis. Important modifications of many of Tessier's revolutionary procedures have been put forth by Obwegeser,⁴ Henderson and Jackson⁵ and Epker and Wolford.⁶⁻⁸ These modifications and others now allow improvement, if not correction, of virtually all types of dentofacial deformities.

CASE REPORT

An 18-year-old boy was referred for correction of facial deformity. It was learned during the interview of the patient that he was unable to chew his food and that he was very unhappy about his facial appearance. His mother stated that his school mates teased him about his appearance.

EXAMINATION

Clinical examination and esthetic analysis of the face revealed infra-orbital and malar retrusion, absolute anteroposterior and vertical maxillary deficiency and apparent horizontal maxillary deficiency. Retrusion of the upper lip accompanied an acute naso-labial angle, normal dorsonasal projection, prominence and eversion of the lower lip, obtuse gonial angle as well as mandibular excess. A severely mutilated skeletal Class III malocclusion was evident.

Radiographic and cephalometric evaluations confirmed the presence of malar-maxillary deficiency. Transverse skeletal asymmetries, mandibular excess as well as impacted third molars were also evident.

MANAGEMENT

Joint orthodontic-surgical management was designed to be complementary in achieving not only a functional skeleto-dental relationship, but also pleasing facial balance. Orthodontic treatment consisted of dento-alveolar

arch coordination and alignment in both the maxilla and mandible. Space consolidation, improvement of the axial inclination of the teeth was achieved. Surgical treatment consisted of intraoral bilateral mandibular sagittal osteotomies to reposition the mandible and simultaneous modified LeFort III malar-maxillary osteotomy with bone grafting to advance the malar-maxillary complex (Figs. 1, 2 and 3). These midface osteotomies were carried out through combined intraoral and bilateral subciliary extra-oral approaches. The impacted mandibular third permanent molar teeth were removed. However, removal of the maxillary third permanent molar teeth was delayed to ensure a solid vertical wall of the tuberosity, which must abut with the bone grafts in the pterygo-maxillary fissure. Maxillo-mandibular skeletal and dental fixation was maintained for six weeks.

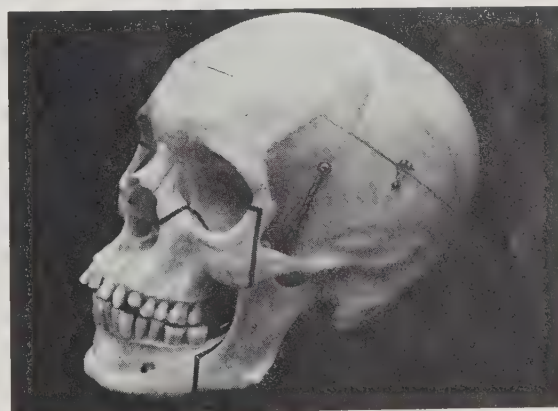


Fig. 1. Malar-maxillary and sagittal mandibular osteotomies.

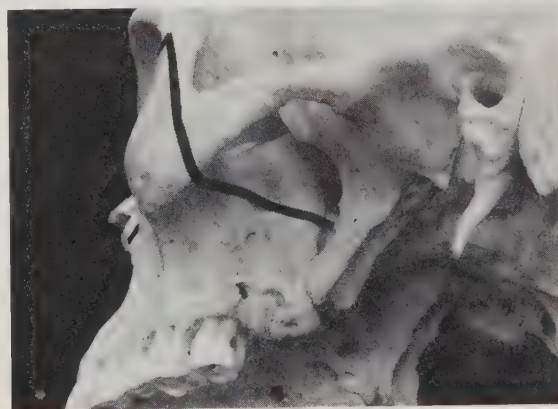


Fig. 2. Outline of osteotomy site in region of pterygomaxillary fissure.



Fig. 3. Bone grafts in zygomatic bone and pterygomaxillary fissure to stabilize advanced position of malar-maxillary complex.

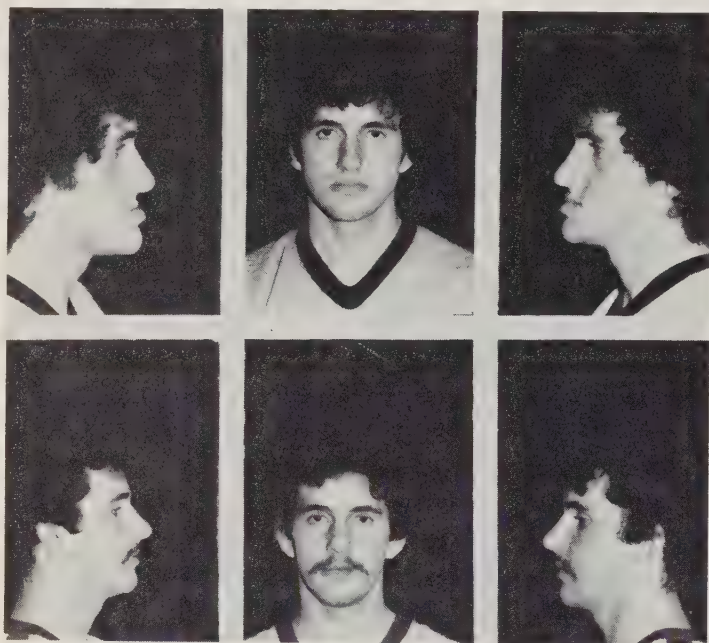


Fig. 4. A. Pretreatment. B. One year post-treatment facial appearance.

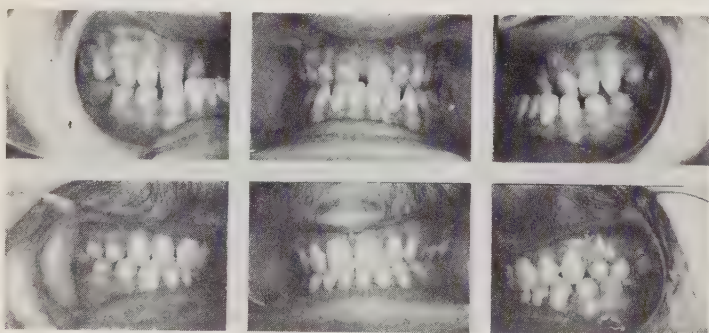


Fig. 5. A (top). Pretreatment. B (bottom). One year post-treatment occlusion.



Fig. 6. A(left) pretreatment. B. One year post-treatment lateral cephalometric radiographs.

RESULTS

Pretreatment and one year post-treatment photographs and radiographs demonstrate an acceptable dento-alveolar relationship, improved facial balance and the absence of noticeable facial scars (Figs. 4, 5, 6, and 7).

SUMMARY

Combined orthodontic-surgical management of a complex dento-facial deformity involving the mid-face is presented. Systematic description of the deformity allows accurate correction which results in improved jaw function and facial balance.

Dr. Harper is senior resident in oral surgery, Victoria General Hospital; Dr. Jensen is assistant professor in orthodontics, Dalhousie University, Halifax, Nova Scotia, and Dr. Precious is associate professor and director of the Graduate Training Program in Oral and Maxillofacial Surgery, Dalhousie University.

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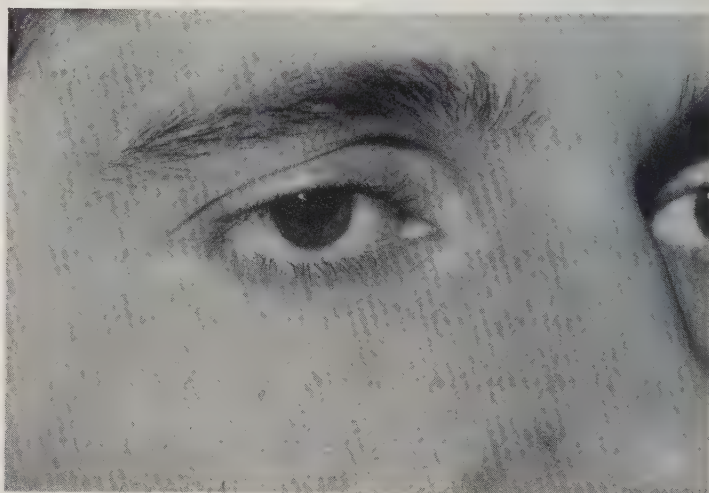


Fig. 7. Absence of noticeable facial scars.

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(Scientific articles)

Previously unpublished articles, critical reviews of material on advances in dentistry and clinical reports are welcomed by the Journal of the Canadian Dental Association for consideration for publication. Material is accepted by the Journal on the understanding it is submitted solely to this publication.

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CLINICAL REPORTS: are brief (up to 1,500 words) reports, case histories and clinical observations. References should be limited and a minimum number of illustrations used.

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Announcements

CANADA

November/novembre

The Ottawa Dental Society presents "Anaesthesia" by Dr. J. Mel Hawkins of Willowdale, Talisman Motor Hotel, Ottawa. November 15, 1982, from 9 am to 5 pm. Staff are invited to the morning session.

The Federation of Dental Societies of Greater Montreal Inc. presents a two-day seminar, Queen Elizabeth Hotel, Montréal, Québec, November 19-20, 1982. Contact: Fédération des Sociétés Dentaires du Grand Montréal Inc., 59 Place de Mézières, Laval-des-Rapides, Québec H7N 5A1. Tél.: 668-3473.

December/décembre

The Toronto Academy of Dentistry's 45th Annual Winter Clinic, Royal York Hotel, Toronto, Ontario, December 6, 1982. Contact: Academy of Dentistry, 234 St. George St., Toronto, Ont. M5R 2P2. Phone: (416) 967-5649. Please note change of day and date from previous years.

Conference on Medical Device Technology in the 80's, Harbour Castle Hotel, Toronto, Ontario, December 6-8, 1982. Contact: Canadian Association of Manufacturers of Medical Devices, 480 Garyray Drive, Weston, Ont. M9L 1P8. Phone: (416) 745-9210.

International

November/novembre

Israel Dental Association's International Meeting, Tel-Aviv, Israel, November, 1982. Contact: Israel Government Tourist Office, 102 Bloor Street West, Toronto, Ontario M5S 1M8; (416) 964-3784.

1st World Congress of the Mexican College of Dentists, Acapulco, Mexico, November 14-17, 1982. Contact: Mexican National College of Dentists, Patricio Sanz No. 1747 C-103 & 104, Col des Valle, Mexico 03100 D.F.

The 1982 Formal Continuing Education Clinic Program will be held at the 36th International Education Congress of Dental Technology, Sheraton Centre, New York City, N.Y., November 18-20, 1982. For further information, contact: IECDT, Suite 507, 1500 Broadway, New York, N.Y. 10036, or call Arthur D. Wilde, Executive Director, at (212) 730-0580.

International Congress of the Association Dentaire Francaise, Palais des Congres, Paris, France, November 23-27, 1982. Examining the two main aspects of professional activity — Preventive Dentistry & Therapeutic Care. Simultaneous interpretation in English, French and German will be available during the main scheduled events. Contact: Dr. Guy Roberts, Secretary-General, 92 avenue de Wagram, 75017 Paris, France.

British Dental Association — Metropolitan Branch, First International Prosthodontic Symposium, Royal Lancaster Hotel, London, England, November 25-27, 1982. Contact: Dr. M. Seymour, Programme Co-ordinator, 22 Devonshire Place, London WIN 1PD, England.

December/décembre

The Sri Lanka Dental Association's 50th Anniversary, Colombo, December 4-6, 1982. Contact: Dr. L.S.W. Dassanayake, Chairman, Organising Committee, Sri Lanka Dental Association, Professional Centre, 275/5, Baudhaloka Mawartha, Colombo 7, Sri Lanka.

The Barbados Dental Association's 2nd Convention for The Caribbean Atlantic Regional Dental Association in conjunction with the Institute for Further Education, Barbados, W.I., December 5-8, 1982. Contact: Dr. Bernard Tuckman, 720 North Park Ave., Easton, Connecticut 06612, U.S.A.

The 37th Indian Dental Conference, Bangalore, India, December 26-29, 1982. Contact: Dr. Pradip Jayna, Hon. General Secretary, M-75, Connaught Circus, New Delhi-110001, India.

1983+

Eighth Annual Yankee Dental Congress, Sheraton-Boston Hotel, Boston, January 13-16, 1983. Presented by the Massachusetts Dental Society, the Congress is the sixth largest dental meeting in the U.S. Contact: Massachusetts Dental Society, 36 Washington Street, Wellesley Hills, MA 02181.

The Ottawa Dental Society presents "Orthodontics" by Dr. Gavin James of Orillia, Talisman Motor Hotel, Ottawa, January 17, 1983, from 9am to 5pm.

The 13th Annual Miami Winter Meeting, sponsored by the East Coast District Dental Society (FL), Fontainebleau Hilton, Miami Beach, Florida, January 20-22, 1983. Contact: East Coast District Dental Society, 420 South Dixie Highway, 2-E,

Coral Gables, Florida 33146. Phone: (305) 667-3647.

The "Kieferorthopadische Fortbildungstagung in Kitzbuhel" meeting, Kitzbuhel/Tyrol, Austria, January 30- February 5, 1983. Contact: Medizinische Ausstellungen- und Werbegesellschaft, Maria Rodler & Co., A-1014 Wien I, Freyung 6, Postfach 155.

The 118th Midwinter Meeting of the Chicago Dental Society, Conrad Hilton Hotel, Chicago, Illinois, February 20-23, 1983. Contact: Chicago Dental Society, 30 North Michigan Avenue, Chicago, Illinois 60602, or phone: (312) 726-4076.

Joint Meeting of the ODS, ODN&AA, and Hygienists will be held in Ottawa, February 21, 1983. Table clinics, commercial exhibits and films will be held. The theme is "Debugging your Dental Office."

9th Congress of Dentistry for Children, Wenworth Melbourne Hotel, Australia, February 21-24, 1983. Contact: Dr. Roger K. Hall, Royal Children's Hospital, Parkville, 3052, Victoria, Australia.

Virgin Islands Dental Association Convention, February 27 to March 5, 1983. This year's theme is "Nutrition, Awareness, and Future Focus", and speakers include Drs. Cheraskin, Ken Olsen, Robert Goepp and Harold Slavkin. Limited to 300 registrants. For information contact: Dr. R. Brandon, 85 Lonsdale Drive, London, Ontario N6G 1T4.

The International Congress of Oral Implantologists Annual Meeting and Scientific Sessions, Beverly Hilton Hotel, Beverly Hills, CA, March 11-13, 1983. Contact: Mr. Clifford J. Kirschner, Executive Director, The International Congress of Oral Implantologists, P.O. Box 2277, Grand Central Station, New York, N.Y. 10163, (201) 783-6300.

International Meeting for Dental Continuing Education, Kulm-Hotel, St. Moritz, Switzerland, March 14-27, 1983. For details and program, contact: Downtown Travel Centre, 807 Hornby Street, Vancouver, B.C. V6Z 1T9. Phone: (604) 684-6471.

International Conference of Dental Surgeons, Rawalpindi/Islamabad, Pakistan, March 22-26, 1983. Contact: Chairman, Organizing Committee, Armed Forces Institute of Dentistry, Rawalpindi, Pakistan.

A Periodontal Symposium, presented by the Ottawa Dental Society, will be held at the Talisman Motor Hotel, Ottawa, March 28, 1983, from 9am to 5pm. Speakers are Drs. Myron Poplove, Richard Yamaoka, James MacDonald, Jean-Marc

Vincent, André Marcil, Dan Morrow, John Morrow, John Whyte and Bruce Squires.

"Pain Control — Something New and Exciting," presented by **The Maxillofacial Pain Control Center**, Temple University, Philadelphia, PA, Saturday, March 28, 1983. The clinicians include Samuel Seltzer, Robert Pollock, Dorothy Dewart and Louis Dubin. For further information contact: Continuing Education Department, School of Dentistry, Temple University, 3223 N. Broad Street, Philadelphia, PA 19140; (215) 221-2995.

The Ottawa Dental Society presents "Predictable Restorative Procedures" by Dr. Alvin Fillastre of the L.D. Pankey Institute, Florida, Talisman Motor Hotel, Ottawa, April 18, 1983, from 9am to 5pm. The meeting will be followed by dinner, a general business meeting and elections for ODS members.

International Symposium on Biomechanical Aspects of Prosthodontics, presented by Professor George Zarb, Chairman of Graduate and Undergraduate Prosthodontics, Faculty of Dentistry, University of Toronto, and sponsored by The Hebrew University-Hadassah Faculty of Dental Medicine and the Toronto Alumni Chapter of the Alpha Omega Fraternity, Jerusalem, April 20-21, 1983. Contact: Professor J. Pietrokovski, Director of Removable Prosthodontics, Department of Oral Rehabilitation, The Hebrew University-Hadassah Faculty of Dental Medicine, P.O.B. 12000, Jerusalem, Israel; or Dr. Hart Levin, Co-Chairman, 2006 Bathurst Street, Toronto, Canada M5P 3L1, (416) 781-2751.

Alabama Implant Congress VX, Birmingham, Alabama, April 21-24, 1983. Contact: Alabama Implant Study Group, P.O. Box 4682, Birmingham, Alabama 35206.

9th Annual Meeting of The Society for Biomaterials and 15th International Biomaterials Symposium, Birmingham Hilton, Birmingham, Alabama, April 27 to May 1, 1983. Contact: Society for Biomaterials, c/o Dr. Robert G. Craig, Department of Dental Materials, School of Dentistry, University of Michigan, Ann Arbor, Michigan 48109.

First International Symposium on Periodontics and Restorative Dentistry, Sheraton-Boston Hotel, Boston, Massachusetts, April 28-30, 1983. Contact: Kim Vander Steen, Quintessence Publishing Co., Inc., 8 S. Michigan Avenue, Suite 2301, Chicago, Illinois 60603. Phone: (312) 782-3221.

The North Central region, in conjunction with the Northeastern region of the American Academy of Dental Group Practice, will hold its 1983 annual meeting in Canada, Westin Hotel, Toronto, Ont., May 13-15, 1983. Contact: American Academy of Dental Group Practice, Ms. Joann Junkins, Executive Secretary, 1709 Elka Lane, Madison, Wisconsin 53704, Phone: (608) 241-2609.

Ontario Dental Association 116th Annual Spring Meeting, The Sheraton Centre, Toronto, Ontario, May 15-18, 1983. Contact: Mrs. W.C. Durham, 234 St. George Street, Toronto, Ontario M5R 2P1.

"Medic Canada '83... Towards the Year 2000", a major international health care/medical devices conference and exhibition, Edmonton, Alberta, May 29-31, 1983. Contact: Robert S. First, Inc., 707 Westchester Avenue, White Plains, N.Y. 10604; (914) 949-4248.

The 1983 Annual Convention of Les Journées Dentaires du Québec, Montréal, Québec, May 28-June 1, 1983. Contact: Dr. Morton Lang, Executive Director, Les Journées Dentaires du Québec, 3565 rue Berri, Suite 200, Montréal, Québec H2L 4G3. Phone: (514) 842-9112.

The Canadian Association of Oral and Maxillofacial Surgeons Meeting, Vancouver, British Columbia, June 3-6, 1983. Contact: Dr. Brian M. Abrams, Secretary, Canadian Association of Oral & Maxillofacial Surgeons, 410 - 11012 MacLeod St.S., Calgary, Alta. T2J 6A5.

The next meeting of the American Dental Society of Europe will be held at the St. Pierre Park Hotel, Guernsey from June 28 to July 1, 1983. All enquiries should be made to: Brian J. Parkins, Hon. Secretary, 57 Portland Place, London W1N 3AH England.

The 5th Canadian Congress of Dentistry for Children, Westin Hotel, Calgary, Alberta, July 1-3, 1983. Contact: Dr. Jack A. Derbyshire, 496-115-9th Avenue S.E., Calgary, Alberta T2G 0P5. Phone: (403) 262-7000.

6th Dentistry International Congress, Rio de Janeiro, Brazil, July 16-21, 1983. For further information contact: A.B.O. — Rio de Janeiro, Ave. 13 de Maio — S/1001/6, CEP. 20.031, Rio de Janeiro, RJ, Brazil.

Meeting of the Canadian Academy of Prosthodontics, Vancouver, B.C., September 20-22, 1983. Contact: Dr. B.M. Jackson, 22 Water Street S., Kitchener, Ontario N2G 4K4.

Canadian Dental Association, 1983 National Convention, Vancouver, British Columbia, September 25-28, 1983.

The Royal College of Dentists of Canada Symposium on Periodontal Diseases, generously supported by Colgate-Palmolive Canada, as part of the Canadian Dental Association's National Convention, Vancouver, B.C., Monday, September 26, 1983. The keynote speaker for the Symposium will be Dr. Harald Löe, newly appointed Director of the National Institute of Dental Research, Bethesda, Maryland, and presently Dean of the School of Dental Medicine at The University of Connecticut.

Fédération Dentaire Internationale, 71st Annual World Dental Congress, Tokyo, Japan, November 14-20, 1983. Contact: Japan Dental Association, 1-20, Kudan-Kita 4-chome, Chiyoda-ku, Tokyo 102, Japan.

Canadian Dental Association, 1984 National Convention, Montreal, Quebec, April 8-12, 1984. Contact: Dr. Morton Lang, O.D.Q., 3565 Berri St., Suite 200, Montreal, Que. H2L 4G3. Phone: (514) 842-9112.

The 1984 Annual Convention of Les Journées Dentaires du Québec, Montréal, Québec, April 8-12, 1984. The convention will be held jointly with the Canadian Dental Association convention.

1st International Congress of Medical Law and Ethics in Dentistry, Tel-Aviv, Israel, April 8-13, 1984. Contact: Israel Government Tourist Office, 102 Bloor Street West, Toronto, Ontario M5S 1M8; (416) 964-3784.

4th World Congress of Pain, sponsored by the International Association for the Study of Pain, Seattle, Washington, USA, August 31 to September 5, 1984. For information contact: Louisa Jones, Executive Secretary, IASP, 1309 Summit Avenue, Room 101, Seattle, Washington 98101 USA. Phone: (206) 292-7521.

Canadian Dental Association, 1985 National Convention, Ottawa, Ontario, September 29-October 2, 1985.

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Practitioners interested in registration and additional information, please contact Professor J. Pietrokovski, Director of Removable Prosthodontics, Department of Oral Rehabilitation, The Hebrew University-Hadassah Faculty of Dental Medicine, P.O.B. 12000, Jerusalem, Israel — or to Dr. Hart Levin, Co-Chairman, 2006 Bathurst Street, Toronto, Canada M5P 3L1, Tel.: (416) 781-2751.

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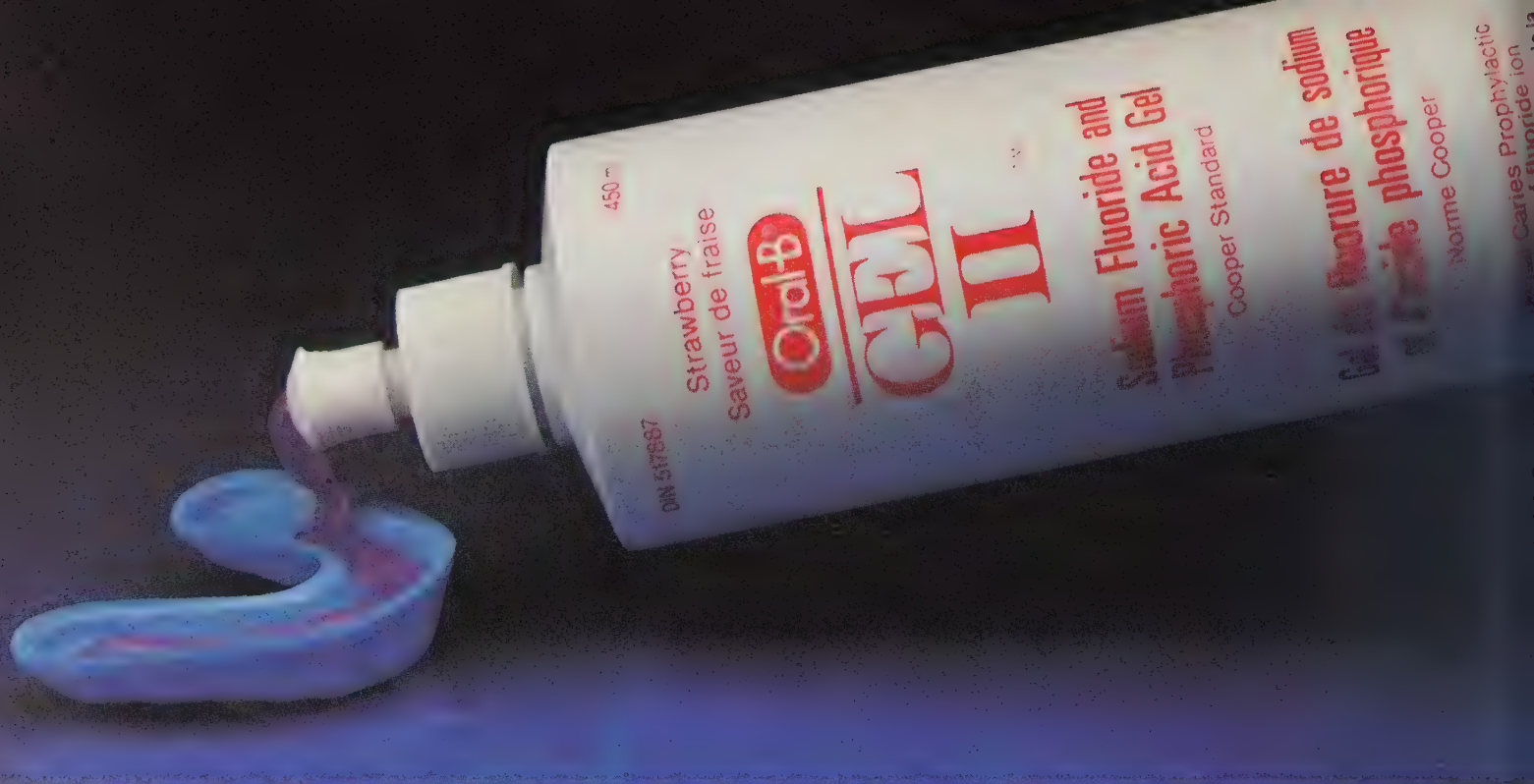
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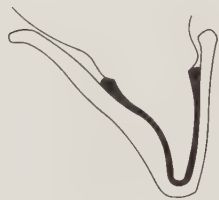
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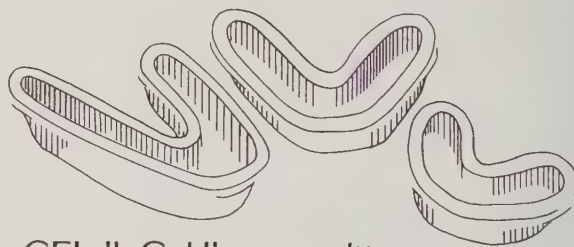
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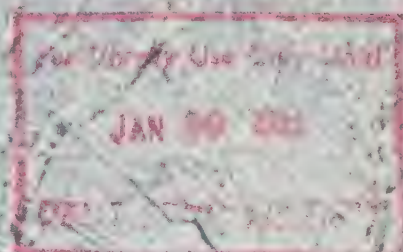
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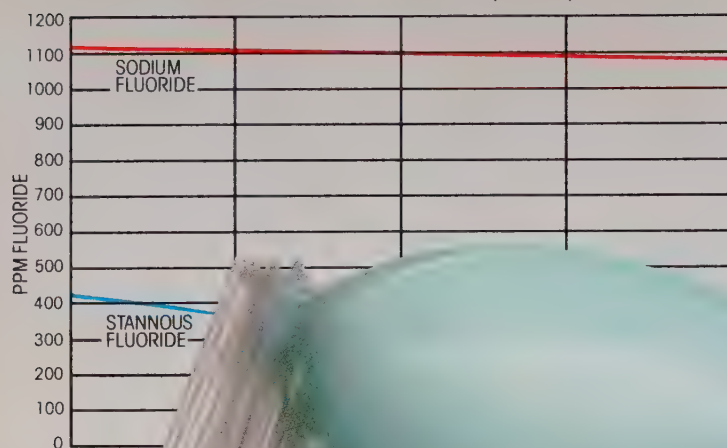
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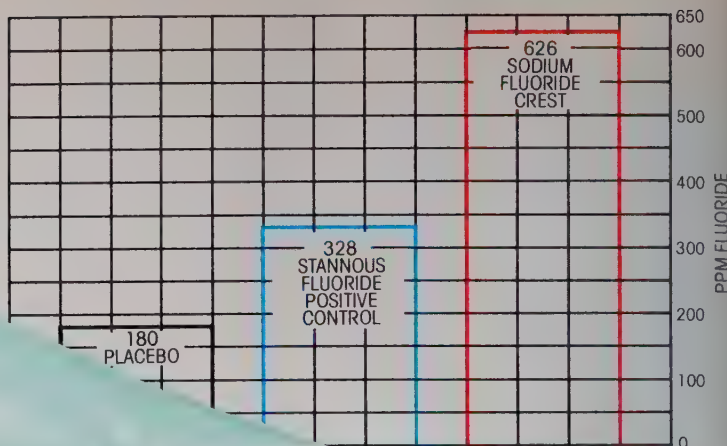
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References

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Orthodontics

Dr. Alan Lowe

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The status of
Hepatitis B vaccine
in Canada

Report of Board of
Governors' annual
meeting

Forensic dentistry

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- 748** Selon le président de l'ADC, le Dr William R. Thompson, il est essentiel que l'ADC possède des moyens de communication efficaces si elle veut "agir et réagir comme il convient devant les préoccupations de ses membres."

Lettres

- 753** Il ne faudrait quand même pas que le Journal de l'ADC devienne le véhicule pour des suggestions aux fonctionnaires gouvernementaux et nous implique dans ce genre de transactions, a dit le Dr Claude Chicoine, président de l'ACDQ.

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Journal

de l'Association
Dentaire
Canadienne

décembre
1982

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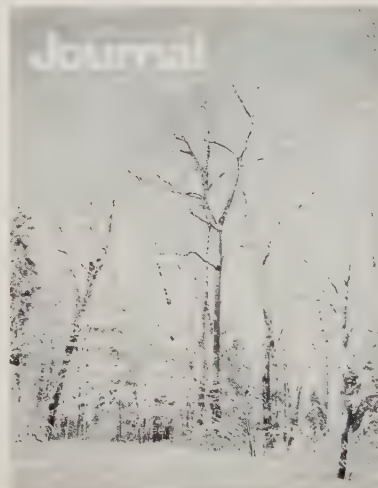
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Distribution du
vaccin contre
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au Canada

Rapport sur
l'assemblée
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Veuillez nous prévenir le 10 du mois de tout changement d'adresse pour recevoir le journal à votre nouvelle adresse le mois suivant.

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La direction du Journal ne partage pas nécessairement les opinions qu'expriment ses collaborateurs à moins que l'Association Dentaire Canadienne ne les ait adoptées officiellement.

C O M M U N I C A T I O N

"As a nation, Canada represents the triumph of communication over geography"

— N. Compton 1961

The Canadian Dental Association, through its Board of Governors, represents the interests of dentists across Canada. The Board, in turn, elects an Executive Council and a Management Committee, to enact the policy decisions of the Board, to conduct the business of the Association, including financial, and to ensure that councils and committees of the Association discuss and prepare recommendations on current applicable issues. Through this organizational structure, the positions which are to be taken by your Association are deliberated and then presented in submissions to, and negotiations with, government agencies, and in discussions with international, national and provincial dental organizations.

As your new President, I am pleased with the improvement in direct contact with all organizations and we are experiencing a high level of communication with the federal government — with Health and Welfare and its many departments and with the departments of Finance, Revenue and the Tariff Board.

Decisions, negotiations, issues, problems and general information are, however, only pertinent to the individual dentist if the information is related with sufficient detail to be meaningful and in a consistent and timely manner — therefore through effective communication.

We all know how important effective communication is in our dentist-patient relationship and indeed, in our family life. We are continually looking for methods of improvement in more effective listening, astute perception and increased information retention, while at the same time attempting to minimize misinterpretation. Although the venues for communication are quite different, a national dental association must also be an effective communicator and listener if it is to act and react in a forthright manner to the concerns of its members.

Many issues, and much information, are communicated to you through the Journal of the Canadian Dental Association, and recent Journal improvements allow late news to be inserted in a special section. However, certain cur-

rent concerns such as the recent federal budget, require another format to ensure full detail is related to the membership most expediently, and to encourage follow up action. The CDA Communiqué and direct letter mailings afford such a venue and will continue to be expanded. Newspaper articles and speeches will also be utilized when applicable as they allow in-depth coverage and varying viewpoints on controversial issues. Dissemination of information therefore, is an essential part of our professional responsibility as an association and we must continue to improve it.

Lines of communication, however, go in both directions and so you also have a responsibility to ensure that your Board of Governors representatives are well informed of your concerns. Such representatives can only act in the best interests of the profession and reflect the feelings of the majority if you communicate with him/her through your provincial association, through letters to the editor in the Journal, and through direct communication.

In this latter area I have instituted a limited number of "Call the President" days during my tenure so that any CDA member may relate his/her current concern, ask questions, or voice opinions in a specific area, directly to the President. If the answer is not immediately available, it will be researched and an answer will be forthcoming.

I am confident that if the profession is kept more fully and more directly informed about the specific on-going issues, and is provided with the rationale for decisions we will win your support, or indeed there will be positive recommendations forthcoming which will ensure further improvements. The end result will be increased participation which is the essential ingredient for the growth of any organization and a marked reduction in misunderstanding between organized dentistry and the dentists it represents.

— Dr. William R. Thompson,
President, Canadian Dental
Association

LES COMMUNICATIONS

"En tant que nation, le Canada illustre le triomphe des communications sur l'étendue géographique."

— N. Compton 1961

L'Association dentaire canadienne représente, par l'intermédiaire de son Conseil d'administration, les intérêts des dentistes du Canada tout entier. Celui-ci élit un Conseil exécutif et un Comité de gestion chargés de mettre en vigueur les décisions qu'il prend, de s'occuper des affaires de l'association (y compris les questions financières) et d'assurer que les divers conseils et comités de l'association préparent et discutent des recommandations touchant les sujets à l'ordre du jour. Grâce à cette constitution, les positions que l'association devra prendre sont débattues, puis soumises aux agences gouvernementales ainsi qu'aux organisations dentaires provinciales, nationales et internationales à des fins de discussions et de négociations.

À titre de nouveau président de l'ADC, je suis heureux de constater que les communications directes se sont améliorées avec toutes les organisations et que celles que l'association a avec le gouvernement fédéral — Santé et Bien-être social Canada et ses nombreuses directions, Finances Canada, Revenu Canada et la Commission du tarif — sont plus intensives.

Toutefois, les décisions, les négociations, les questions, les problèmes et les renseignements de caractère général sont pertinents pour chaque dentiste seulement dans la mesure où on lui transmet de façon consistante et en temps opportun des informations détaillées et significatives. Autrement dit, les communications doivent être efficaces.

Nous savons tous combien des communications efficaces sont importantes dans nos rapports avec les patients et même dans nos vies privées. Nous cherchons sans cesse de meilleures méthodes pour rendre notre écoute plus attentive, notre perception plus juste et notre mémoire plus fidèle. En même temps, nous tentons de réduire les erreurs d'interprétation. Bien que les milieux des communications diffèrent beaucoup les uns des autres, il est clair qu'une association dentaire nationale doit savoir communiquer avec ses membres et leur prêter une oreille attentive, si elle veut pouvoir agir et réagir comme il convient pour défendre leurs intérêts.

Le Journal de l'Association dentaire canadienne vous renseigne sur de nombreux sujets et, récemment, on en améliorait la présentation de manière à pouvoir vous donner les toutes dernières nouvelles dans une section spéciale. Cependant, certains sujets d'actualité, tel le dernier budget du gouvernement fédéral, méritent d'être

exposés autrement et d'une façon plus expéditive, afin que chacun en connaisse tous les détails et soit incité à y donner suite. Dans ces occasions, l'ADC se sert de communiqués et de bulletins spéciaux qu'elle envoie directement à ses membres. Ces moyens continueront à être mis en oeuvre. Par ailleurs, quand ce sera possible, on publiera des articles dans les journaux ou on fera des discours qui permettront d'approfondir les questions discutées et d'exprimer différents points de vue sur les sujets controversés. Aussi la diffusion de l'information est-elle une part essentielle de nos responsabilités professionnelles et devons-nous continuer à chercher des améliorations.

Toutefois, il est entendu que les communications doivent se faire dans les deux sens et c'est pourquoi chacun de vous doit également s'assurer que votre représentant (e) auprès du Conseil d'administration est bien renseigné (e) sur les questions qui vous préoccupent. Votre représentant (e) agira dans les meilleurs intérêts de la profession et exprimera les sentiments de la majorité. Encore faut-il que vous lui en fassiez part par l'intermédiaire de votre association provinciale, que vous écriviez au rédacteur en chef du Journal ou que vous communiquiez directement avec l'ADC.

À ce propos, j'ai fixé un certain nombre de jours durant mon mandat où vous pourrez appeler le président. Les membres de l'ADC auront ainsi l'occasion d'exprimer leurs inquiétudes, de poser des questions ou de donner leur avis sur un sujet précis en s'adressant directement à moi. Si la réponse à la question posée n'est pas disponible lors de l'appel, des recherches seront faites et une réponse donnée un peu plus tard.

Je suis persuadé que si les membres de la profession sont renseignées de façon plus complète et plus directe sur les questions courantes et qu'ils connaissent les raisons pour lesquelles certaines décisions sont prises, l'ADC aura leur appui ou bien ils lui feront des recommandations qui amèneront des améliorations. Il en résultera une participation accrue, ce qui constitue en élément essentiel pour qu'une organisation soit en progrès. De cette manière seront éliminées les mésententes qui peuvent opposer les associations dentaires et les dentistes qu'elles représentent.

*Le président de
l'Association dentaire canadienne,
le Dr William R. Thompson*

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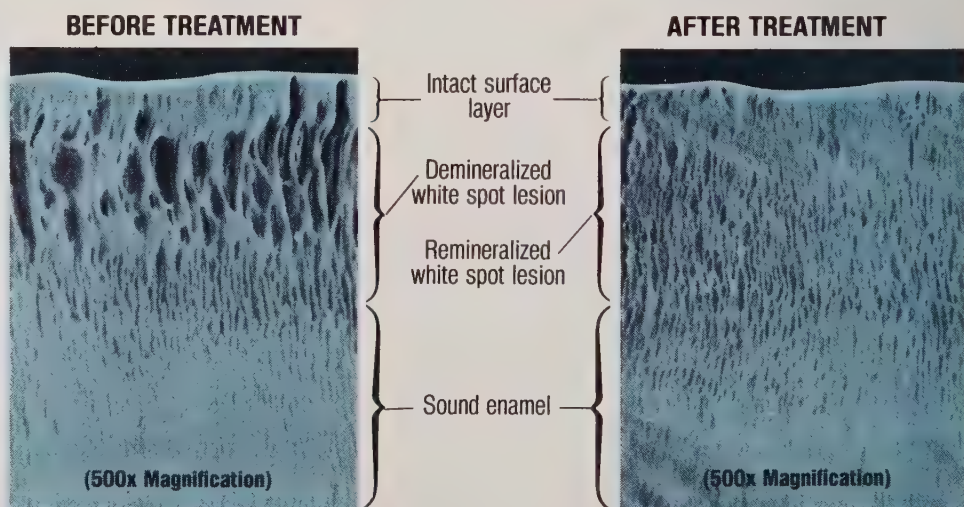
REMINERALIZATION.

Remineralization is the reversal of the demineralization process before a white spot lesion becomes a cavity (1). Studies have indicated that the presence of fluorides in demineralized enamel improves the natural remineralization process (2-5).

COLGATE'S TWO FLUORIDE STUDY.

In vitro studies (6) on demineralized enamel show that treatment with Colgate's combination of sodium monofluorophosphate and sodium

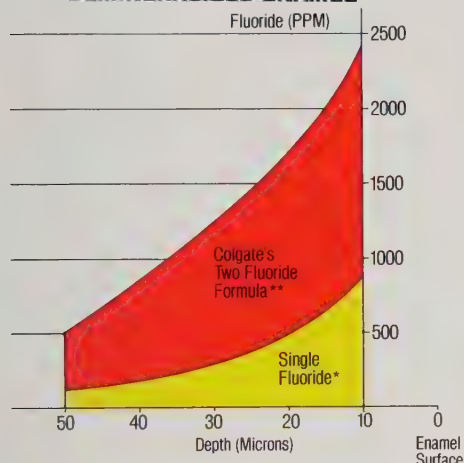
fluoride** actively promotes more complete remineralization of white spot lesions than a single fluoride formulation*. This improved remineralization of white spot lesions, we believe, ultimately leads to a greater reduction in cavities.



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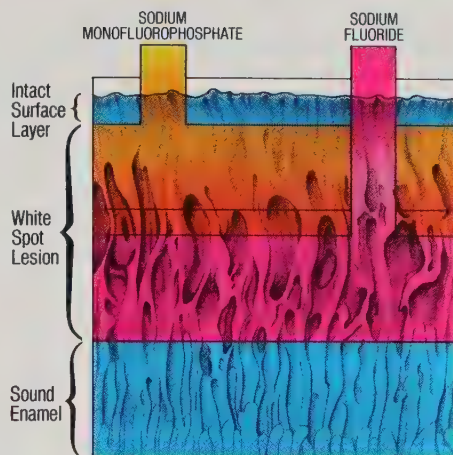
FLUORIDE UPTAKE BY DEMINERALIZED ENAMEL



Within the white spot lesion, sodium monofluorophosphate remineralizes enamel primarily at the surface while sodium fluoride penetrates deeper to remineralize sub-surface regions. This combined remineralizing action

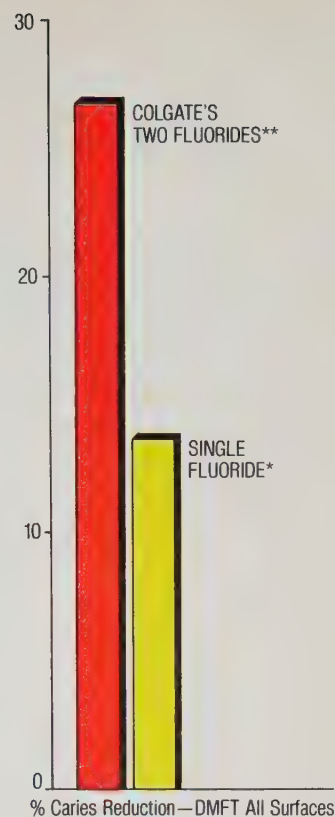
of Colgate's two fluoride formula promotes more complete remineralization of white spot lesions than a single fluoride formulation*.

REMINERALIZATION ACTION OF COLGATE'S TWO FLUORIDES



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1. Backer-Dirks, O., J. Dent. Res., **45**, 503-511, 1966.
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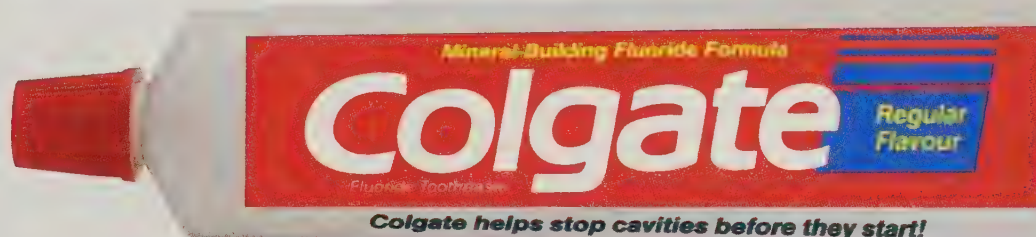
* Sodium monofluorophosphate (0.76%)

** Sodium monofluorophosphate (0.76%) and sodium fluoride (0.10%)



+ "Colgate Toothpaste contains sodium monofluorophosphate and sodium fluoride which are, in our opinion, effective decay preventive agents and are of significant value when used in a conscientiously applied program of oral hygiene and regular professional care."

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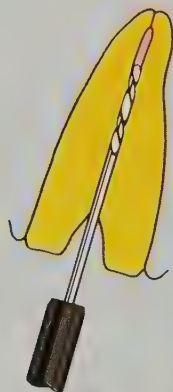


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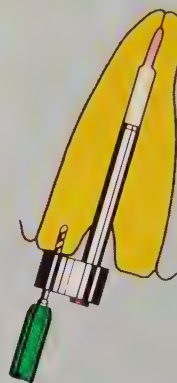
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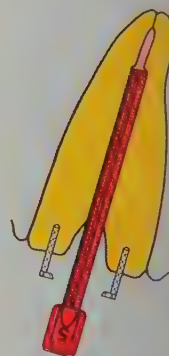
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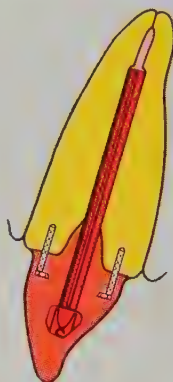
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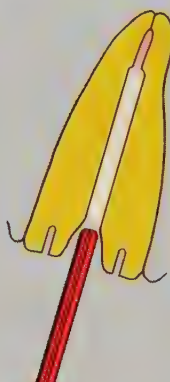
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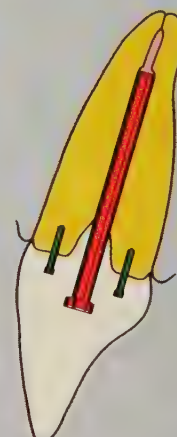
**4 BURNOUT POST
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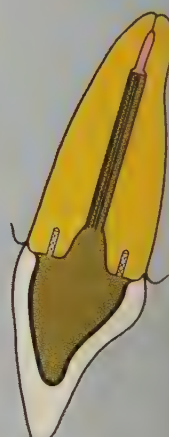
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Negotiations in Quebec

I have read with interest the "news" concerning the province of Quebec in the column "In the News" of the CDA Journal, Vol. 48, No. 9.

I admit sincerely that, thanks to this article, I have learned some unknown things concerning the agreement between the Québec Government and the organization I represent, i.e. the QDSA.

Let us point out immediately that the QDSA is an integral part of the negotiations with the government and that the ODQ is totally absent from these negotiations. Let us add moreover that the government has however consulted the ODQ regarding the first project of governmental decree and that the ODQ did agree with it.

Now this project has in fact been modified by the negotiations and that is what the dentists accepted at a general meeting on July 17.

Evaluation of dentists

I would like to take umbrage with the statement by Dr. Jean-Louis Fortin in the CDA Journal, Vol. 48, No. 9, Page 570 when he states that "only dentists can evaluate dentists — there is no evaluation of a dentist if he works alone."

Those of us that are "wet-fingered dentists" have our work evaluated by our confreres be it specialist or general practitioner who observes our treatment. I am thinking of the orthodontists, the periodontists, the endodontists, oral surgeons and others.

The true professional is able to be his own evaluator. On almost any weekend and often on days that a dentist must take out of the office at his/her own expense, one can see dentists endeavouring to improve the quality of their service. I do not know of any

Let us add also that when in the same paragraph you say: "The QDSA and ODQ noted that the Québec Government might be opening a door for dental hygienists to sign agreements individually..." that is pure invention. The Association has never said such words. Really, the CDA Journal should not become a vehicle for making suggestions to the government officials and should not in-

volve us in such transactions.

We hope that these facts will be useful to your readers and that you will publish them also in English since "In the News" is presented in both languages.

In closing, we remind you that we are at your disposal for any relevant information.

*Claude Chicoine, DDS
President of the QDSA*

Les négociations au Québec

C'est avec intérêt que j'ai pris connaissance des "nouvelles" du Québec sous la rubrique "Les Actualités" du Journal de l'A.D.C. vol. 48 no. 9.

Je vous avoue sincèrement que cet article m'a permis d'apprendre des choses inconnues quant à l'entente intervenue entre le gouvernement du Québec et l'organisme que je représente, soit l'A.C.D.Q.

Précisons immédiatement que l'A.C.D.Q. est partie intégrante aux négociations avec le gouvernement et que l'O.D.Q. est totalement absent de ces négociations. Ajoutons à ces précisions que l'O.D.Q. a cependant été consulté par le gouvernement quant au premier projet de décret gouvernemental et que l'Ordre était en accord avec ce projet.

Or, ce projet a justement été modifié par la négociation et c'est ce que les dentistes ont accepté en assemblée générale le 17 juillet.

Ajoutons aussi que, lorsque dans un même paragraphe, vous dites que "selon l'A.C.D.Q. et l'O.D.Q., le gouvernement du Québec inviterait peut-être les hygiénistes dentaires à signer des ententes particulières..." cela relève de la pure invention. Jamais l'Association n'a tenu de tels propos. Il ne faudrait quand même pas que le Journal de l'A.D.C. devienne le véhicule pour des suggestions aux fonctionnaires gouvernementaux et nous implique dans ce genre de transactions.

Nous espérons que ces précisions seront utiles à vos lecteurs et que vous les ferez aussi paraître en anglais, puisque "Les Actualités" sont présentées dans les deux langues.

Nous concluons en vous exprimant notre disposition pour toute information pertinente.

*Le président, ACDQ,
Claude Chicoine, dds*

other group that is so dedicated to continuing education and thusly are more able to be evaluators.

I realize that dentists, in the main, do not practise in a hospital environment or in an environment where others may see their efforts. However, I do not know of any study proving that group practices produce services of better quality. Economic and other

advantages may encourage the formation of group practices but I believe that Dr. Fortin's premise is unfounded and while I defend his right to believe thusly, I would hope that ongoing quality control and peer evaluation do not depend on group practices.

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Nova Scotia's children's dental care plan slashed

A cost-cutting program in Nova Scotia has dealt a severe blow to that province's children's dental health care program.

The provincial government announced on October 14 that it would impose an age ceiling on children eligible to participate in the plan and that it would also eliminate all but one of the five services covered under the preventive orthodontics aspect of the plan.

The pared program became effective on November 1.

The government did not indicate the period of the suspension of the services and the Nova Scotia Dental Association fears the dental surgical program will be the next to go.

Nova Scotia Dental Association Executive Director D. V. Pamenter said the government indicated it had to save \$1,080,000 in the fiscal year ending in March, 1983. Although Mr. Pamenter acknowledged the government will reduce its spending "in the vicinity of \$1 million" through

this cost-cutting move, he pointed out that the government was already operating below the budgeted figure for six months when it announced the cutbacks in the dental program.

Pamenter said the Association met on several occasions with Health Minister Gerald Sheehy to try to save the dental plan. He said the government was shown how it could reduce its budget even further without the reduction of services.

"But they didn't buy that," he said.

Prior to the cutbacks, the children's dental program provided for dental care through Medical Services Insurance for children born since January 1, 1967. More than 50 per cent of the province's children were using the program and Pamenter said this represented about 194,000, of which 101,000 were beneficiaries.

In an effort to reduce costs, which had escalated from 25-30 per cent over the last year, the government has decided to terminate the program for children when they reach

16 years of age. Those born in 1967 will not be able to participate in the plan after the end of this year, Pamenter said.

The government also gave lack of finances as the main reason for cutting back on the preventive orthodontics program, which originally included five services. Space maintenance is the only service now provided under this program.

"They (the government) have denied essential services to the people," Pamenter said.

"They missed the boat completely (and) are not doing anything to save the plan," Pamenter said it was a "no-win situation" from the very beginning because the government "called all the shots."

The Nova Scotia Dental Association said it is continuing to maintain its lobby against the government's actions, and has issued a press release to all its members. "We gave it a good shot, but certainly it won't stop here," Pamenter said.

National Dental Health Month Workshop



A National Dental Health Month workshop was held September 10 at the Four Seasons Hotel in Ottawa, Ont., where provincial chairmen and CDA staff met to discuss the 1983 campaign in April. Seated, left to right, are: Dr. Michel Carnovis, NDHM Chairman; Dr. F. Smyth, New Brunswick; Dr. R. Gillan, Ontario; Dr. W. Norgate, Manitoba; Dr. L. Smith, Nova Scotia; Dr. G. Lafrenière, Quebec; Mr. Hubert Drouin, Executive Director, CDA; Dr. D.W. Saganski, Saskatchewan; Mr. B. Rawlins, Banfield-Seguin Advertising; Dr. J. Hung, British Columbia; Dr. S. Gillies, Newfoundland; Carolyn Hackland, NDHM Co-ordinator, CDA; Joanne Clovis, Canadian Dental Hygienists' Association; Dr. J. Scott, Alberta; and Carmel Leroux, Secretary, CDA Department of Communications.

Hepatitis B vaccine licensed for use in Canada

"Heptavax B, produced by Merck Sharp and Dohme was licensed for use in Canada on October 26," stated Dr. S.E. Acres, Chief, Communicable Diseases Division, Bureau of Epidemiology, Health Protection Branch, Health and Welfare Canada, in comments prepared for publication in the Canada Diseases Weekly Report on November 6.

"An initial supply of 85,000 doses is available for the Canadian market. Since initial estimates of demand exceeded this quantity, provincial epidemiologists met July 8-9 and addressed the problems of making a fair and equitable distribution.

It was agreed that it could be divided among the provinces and territories on a population basis. The problem of prioritising candidates for vaccination was also addressed — based on known risk of infection to certain persons and the potential for further transmission. Recommendations made by the epidemiologists appear in the following statement.

Not all provinces have chosen to purchase and control distribution of the full allotment which would be available to them on a population basis. For such provinces, adequate quantities will be available directly from the manufacturer."

Hepatitis B Vaccine Statement from the Advisory Committee on Epidemiology (ACE)

The Advisory Committee on Epidemiology believes that hepatitis B vaccine is an effective means of reducing circulation and transmission of hepatitis B virus and of decreasing the risk of acquired infection in those who are susceptible. Early supplies

are likely to be limited. These guidelines are therefore produced in consideration of these constraints.

The committee recognizes that there is a variety of groups at varying degrees of risk, and in providing these guidelines, has attempted to indicate priorities.

In general, three groups have been identified. (A) patients, (B) occupational risk and (C) lifestyle risk. The committee recommends that a proportion of vaccine supplies available

viduals in this group be vaccinated as soon as supplies are available.

Group B

These are individuals at risk by reason of their occupation and include health care personnel exposed to blood and blood products during the course of their work. There will be different priorities among members of this group. It is anticipated the provincial departments of health will identify the priorities within their

Because of the limited initial supply of Heptavax B vaccine, the Advisory Committee on Epidemiology has issued guidelines in an attempt to indicate priorities among candidates.

to the health departments should be allocated to all three groups, but that first priority be given to group (A).

Group A

These are patients at high involuntary risk of infection and include the following:

- infants of HB_sAg positive mothers
- patients receiving multiple injections/transfusions of blood or blood products (e.g. haemophiliacs, thalassaemic patients),
- dialysis patients, and
- new admissions to institutions for the mentally retarded.

The Advisory Committee on Epidemiology recommends that all indi-

viduals in this group be vaccinated as soon as supplies are available.

Group C

These are individuals identified at risk because of their own lifestyle or because of close contact with others. In this group is a wide range of individuals including drug addicts, homosexuals and family contacts of HB_sAg positive individuals.

The Advisory Committee on Epidemiology recommends that control of the vaccine when supplies will be limited, should be totally in the hands of the provincial public health authorities to ensure that —

- a) those deemed at highest risk receive vaccine, and
- b) evaluation of the effectiveness of the vaccine can be carried out.

The implications of Viral Hepatitis for the practice of dentistry

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In 1964 Blumberg⁽¹⁾ discovered in the serum of an Australian aborigine an antigen that cross reacted with antibodies in the serum of patients who had received multiple blood transfusions. Subsequent studies related this "Australia antigen" to serum hepatitis or viral hepatitis B and identified the antigen as a surface component of the DANE particle or Hepatitis B Virus (HBV), now accepted as the causative organism of this disease.

Hepatitis B must be distinguished from the other common types of viral hepatitis, Type A and Type non-A non-B. Hepatitis A, caused by the Hepatitis A Virus (HAV) is common, has a short incubation period of two to six weeks, is spread mainly by the faecal-oral route and generally runs a benign course. It is not associated with a chronic carrier state and it does not lead to chronic liver disease. Viral hepatitis B, on the other hand, has a long incubation of two to six months and is spread mainly by the parenteral inoculation of blood and possibly other body fluids. While in general it runs a benign course, hepatitis B can produce a chronic carrier state and does lead to chronic hepatitis, cirrhosis and probably to primary hepatocellular cancer. The rapidly expanding pool of knowledge concerning viral hepatitis has involved the discovery of new entities. Non-A non-B viral hepatitis probably represents a group of diseases. There appear to be at least two clinical entities, one resembling viral hepatitis A, the other resembling viral hepatitis B. Until specific serologic tests are available, however, our understanding of these entities will remain less than adequate. The Delta agent has complicated matters further⁽²⁾. This recently described viral pathogen has been found to co-exist with two clinical forms of viral hepatitis B infection, fulminant viral hepatitis B and a rapidly progressive form of chronic active hepatitis B, sometimes beginning as an exacerbation of hepatitis in a previously asymptomatic chronic carrier.

HEPATITIS B

Clinical Features

Most patients with acute HBV disease remain asymptomatic. Those who develop symptoms usually experience

malaise, lassitude, anorexia, nausea and upper abdominal discomfort and may experience an urticarial type of rash and joint pains. Patients may be clinically jaundiced (icteric) or anicteric, depending on the severity of the infection. Very mild cases of anicteric hepatitis B occur frequently and it is likely that many of these cases are not diagnosed or do not even seek medical advice.

Course and Prognosis

The possible courses of HBV infection may be listed as follows:

1 Resolution

Complete resolution of the hepatitis with, so far as is known, total recovery of health is the usual outcome. More than 90 per cent of cases behave in this way. The virus, in blood and body fluids, is usually demonstrable for around two months from just prior to clinical onset.

2 Healthy Carriers

Inapparent infection or apparently complete clinical resolution of acute viral hepatitis B may occur but with persistence of viral replication. This is shown by the continued presence of the virus in body fluids for more than six months from disease onset. In our society about five per cent of diagnosed cases will follow this course. Such individuals, in the absence of other evidence of disease, are known as healthy carriers. Many such carriers exist undiagnosed in the general population. A small proportion of known carriers has ceased to be virus positive after a varying number of years but how common this phenomenon is and after how many years it might be anticipated are not known.

3 Chronic Active (CAH) and Chronic Persistent (CPH) Hepatitis

Chronic inflammation of the liver is another possible outcome. This may resolve spontaneously, may continue but not progress (CPH) or may progress to fibrosis and cirrhosis (CAH). A proportion of these patients will later develop primary hepatocellular carcinoma. These patients also are virus carriers. About five per cent of diagnosed cases will follow this course.

4 Fulminant Hepatitis

Some patients, less than one per cent of all cases, will develop extensive acute necrosis of the liver and approximately 80 per cent of these die within a few days. A less acute form, subacute hepatitis, follows a similar course but over a period of a few months. These patients usually produce virus throughout the course of their disease and those living more than a few weeks usually develop cirrhosis.

5 HBV can also cause a number of extrahepatic problems including polyarthrititis, polyarteritis, polyneuritis and glomerulonephritis.

Morbidity and Mortality

Considerable morbidity is found in this condition as patients may be unable to work or maintain a social role for periods of two weeks to six months or longer. This may be further extended in some occupations, such as the health-related fields, in which it is desirable for patients not to return to work until they are no longer producing virus.

Although reported rates from different population groups have varied considerably, the overall mortality rate has been assessed at six-eight per cent (3), with figures several times as high having been reported from high risk groups(4).

Hepatitis B Virus (HBV)

The HBV is a DNA virus 42 nm in diameter. It has a core particle 28 nm in diameter which contains a DNA polymerase, a circular partially double-stranded DNA molecule and two known antigens, the core antigen and e antigen, against which antibodies are produced. The core particle, found by itself only in the nucleus of the hepatocyte, is covered in the cytoplasm with a surface coat. This coat, which contains the Australia or hepatitis B surface antigen (HBsAg), is produced in excess by the liver cell and this excess production appears in the cytoplasm of the hepatocyte, in the blood and in other body fluids as two other forms, a spherical form and a tubular form, both 22 nm in diameter. Antibodies against the HBsAg can also be produced.

Serology of Hepatitis B

Serological markers, which appear in the blood in a recognized sequence, are used in the investigation of this disease. Between 40 and 180 days after infection, HBsAg can be detected in the serum. This is followed by the appearance of a specific DNA polymerase, that polymerase present in the core of the HBV. Soon after this the activities of certain liver-derived serum enzymes become elevated whether or not clinical manifestations are present. From the diagnostic point of view the serum levels of the AST (aspartate glutamate amino transferase) and ALT (alanine glutamate amino transferase) are particularly useful. During resolution of the disease, antibodies to HBsAg (anti-HBs) and to the core antigen (anti-HBc) appear. Testing for anti-HBc can be particularly useful from the diagnostic point of view because this antibody

can appear and remain in the blood during that otherwise confusing period of time which follows disappearance of the HBsAg from the blood but precedes the appearance in the blood of anti-HBs. Another virus associated substance, the e antigen, may also be demonstrated in some cases. Its presence is known to be associated with relatively greater infectivity. Antibodies to the e antigen also develop and are associated with relatively less infectivity.

When complete resolution occurs, HBsAg disappears from the serum between one and six months after onset. In chronic hepatitis and in healthy carriers, HBsAg persists in the serum whether or not anti-HBs and/or anti-HBc are also present. It should be appreciated that HBsAg can be present in the blood in amounts which are below the limits of detection using current diagnostic techniques. Such blood can transmit the disease and such patients can go on to develop chronic liver disease.

Table 1 shows the various combination of serologic markers and indicates their interpretation.

Table 1.			
Patterns of Serological Markers relating to Hepatitis B with their interpretation			
Markers			Interpretation
HB _s Ag	AntiHB _s	AntiHB _c	
-	-	-	Susceptible
+	-	-	
+	-	+	
+	+	-	Potentially Infective
+	+	+	
-	-	+	
-	+	+	Immune
-	+	-	

Prevalence and Incidence

Studies of the occurrence of HBV markers in various populations have provided a great deal of information on the prevalence and incidence of this disease.

Prevalence is often expressed as the percentage of the population which is HBsAg positive; that is virus carriers with or without overt liver disease.

In North America, Western Europe, Australia and New Zealand the prevalence of HBV carriers is around 0.25 per cent. In South and Central America, countries around the Mediterranean, India and China the prevalence of HBV carriers is generally between two and four per cent, while in Sub-Saharan Africa, Egypt, Greenland and South Asia in general, the prevalence is between five and 10 per cent. The highest prevalence is found in the Philippines, New Guinea and some other groups in South-east Asia where carrier rates as high as 20 per cent occur(5,6). Among the Southeast Asia refugees in Canada, carrier rates of HBsAg are about 15 per cent(7). The importance of infection with this virus comes into perspec-

tive with realization of the fact that the virus is carried by as many as 200 million individuals world-wide, approximately five per cent of the earth's population.

A number of sub-types of the virus have been recognized serologically and have been found to form geographic clusters. Sub-type adw is the most common in Northern Europe and the Americas. Sub-typing appears to be of value chiefly in epidemiological studies.

Incidence

The carrier state is more common in males, in urban dwellers⁽⁸⁾ and in persons from lower socio-economic groups⁽⁹⁾. The age range chiefly involved is from four to 40 years⁽⁶⁾. A high incidence occurs in male homosexuals⁽¹⁰⁾, institutionalized cases of Down's syndrome, haemophiliacs, prison inmates and prostitutes⁽¹²⁾.

There is an increased incidence of the disease in health professionals with the highest rates being found in those groups whose practice involves blood-letting in any form. High rates occur in haematology technicians and in persons working in renal dialysis units and on I.V. teams. Among physicians high rates of incidence are found in surgeons and pathologists⁽¹⁴⁾. In dentistry the highest incidence rates have been recorded from oral surgeons⁽¹⁵⁾. In considering the results of studies of HBV incidence using volunteer participants from the health professions, it should be remembered that most potential subjects who have had the disease will already know their own serological status and hence will have no reason to participate. Because of this it seems probable that reported levels of incidence in health professionals are lower than they actually are.

Transmission

The basic reservoir of HBV is the human carrier, convalescent, healthy or with liver disease. While blood is the most common carrier vehicle, other body secretions such as saliva, semen and sweat^(16, 17, 18) may also transmit the disease.

Maynard⁽¹⁶⁾ has listed the possible routes of transmission as follows:

1 Direct Percutaneous Inoculation.

This is probably the major route of virus spread in the low prevalence areas. Ear piercing, tattooing, acupuncture and self administration of drugs by addicts fall into this category and have all been shown to cause transmission. Accidental needle pricks in health professionals are another common example. Transmission by this route in a dental office, due to a contaminated bottle of local anaesthetic, gave rise to 15 cases of the disease with three fatalities⁽¹⁹⁾.

2 Non-Needle Percutaneous Transmission.

HBV can penetrate the body via minute breaks in the epithelia. Simply having virus-contaminated blood on the hands can give rise to transmission⁽²⁰⁾. It seems probable that this route was chiefly responsible in the case of a Pennsylvania oral surgeon who carried HBV and who transmitted the disease to 55 of his patients in

spite of using generally accepted surgical and sterilization techniques⁽²¹⁾.

3 Introduction of Infected Serum onto a Mucosal Surface.

Ingestion of infected serum has resulted in hepatitis B in man but studies in primates make it likely that transmission occurs through oral and pharyngeal mucosa⁽¹¹⁾ rather than the stomach and intestine. The virus is probably destroyed in the upper gastrointestinal tract of humans beyond the neonatal age group. Conjunctival mucosa may also be a portal of entry for the virus. Presumably the virus gains entry via small breaks in the mucosal epithelium.

4 Introduction of Other Body Secretions to Mucosal Surfaces.

There is a higher incidence of hepatitis B in homosexuals and particularly in those with multiple partners⁽¹⁰⁾. The incidence is also higher in prostitutes⁽¹²⁾ and in spouses of infected persons^(10, 18). Familial clustering of cases also occurs. There is an increased incidence in institutionalized persons such as the mentally defective, particularly those with Down's syndrome, and prison inmates. All these cases may be explained by transmission by this route with saliva, semen or other body fluids acting as vehicles.

5 Indirect Transfer of Infective Serum or Plasma via Vectors or Inanimate Environmental Objects.

HBV is relatively stable on environmental surfaces and has been shown to retain infectivity for up to one year. Transmission has been shown to occur via this route, for example in the persons handling computer cards⁽²²⁾, and in laboratory cleaners. Insect vectors have been postulated in the high prevalence areas but while HBV has been isolated from mosquitoes and bed bugs⁽²³⁾ after feeding on HBsAg positive individuals, no direct transmission via insects has been proven⁽²³⁾.

Treatment

There is no effective chemotherapeutic agent against HBV infection, hence the importance of prevention. Hepatitis B immune globulin (HBIG) is available and though its efficacy is less than complete it should be administered following known exposure to infection, for example, when a susceptible dentist pricks a finger while treating an HBV carrier. Even normal gamma globulin can provide some protection under these circumstances and it is probably worth administering if HBIG is not available.

Hepatitis B Vaccine

A vaccine prepared from highly purified inactivated HBsAg has been developed by Merck, Sharp and Dohme Research Laboratories and is expected to become available in Canada in late 1982. It has been extensively tested in the U.S.A. and on Canadian dental students⁽²⁴⁾. No serious side effects have occurred but minor degrees of local erythema and soreness have been reported.

The vaccine, administered by three intramuscular in-

jections at zero, one and six months, appears to produce immunity to all sub-types of HBV and to liver disease caused by the Delta agent. The length of the immunity conferred is not known.

NON-A NON-B HEPATITIS

The clinical features, course and prognosis of a non-A non-B hepatitis can resemble those described for hepatitis B except that the incubation period is approximately a month shorter. However, serological tests to identify the causative viruses are not yet available, and chronic carriers cannot be recognized. The diagnosis is established by exclusion on the basis of negative serological tests for all other known hepatitis viruses. Again there is no effective treatment available.

DENTAL PRACTICE AND HEPATITIS B

Philosophy

The basic objective in the procedures proposed for dental practice is to minimize the possibilities of transmission of the disease to dentists, to dental auxiliary staff and to other dental patients being treated in the same physical facilities. It would be unrealistic to suggest that transmission through dental practice can be eliminated entirely, no matter the precautions taken, but it is not unreasonable to believe that its frequency can be greatly reduced.

In regard to the individual dentist, the decision is entirely personal as to what precautions, if any, are to be taken to minimize the risk of contracting the disease him or herself. There is an overriding responsibility, however, for the dentist to minimize the risk of transmission to his staff and patients.

During the course of dental treatment carried out using generally accepted techniques, saliva and blood are spread over a wide area. Studies done with saliva stained red⁽²⁵⁾ have shown that the dentists' and assistants' hands, arms and front of body clothing, all hand instruments, instrument trays, dental units, lights and chairs, x-ray machines, floors, working surfaces, sinks and often radiographs and patient records are contaminated. Also certain of the instruments used in dental practice, notably the turbine drill and ultrasonic scaler, give rise to the formation of aerosols, invisible clouds of tiny water droplets suspended in air. These are wafted by air currents and can be dispersed over considerable areas. In one study⁽²⁶⁾ of air samples from an operatory in which an HBV carrier was given treatment involving the use of a turbine drill, no virus was recovered from the air. However it seems unwise to conclude from this single report that dispersion of virus by aerosols never occurs.

Further in a high proportion of dental procedures of non-surgical types such as restorative and periodontal treatment, some bleeding occurs so that the saliva is admixed with blood, hence probably increasing the quantity of virus and infectivity.

Recommendations

Certain recommendations apply to all dentists in view of the fact that on statistical grounds every practising dentist must expect to treat an undiagnosed carrier from time to time, perhaps in the order of one or two patients in every thousand.

Firstly, it is advisable for all dentists to be aware of their personal status in regard to HB_sAg, anti Hb_s and anti HB_c. Secondly, protective gloves should be worn for all blood letting procedures on all patients. Thirdly, patients in the high risk groups for hepatitis B should be tested prior to having any active dental treatment to find out if they are carriers of HBV. The patients in this category are as follows:

- a Those giving a history of having had hepatitis B.
- b Those giving a history of having had hepatitis of unknown type during the previous eight years (The eight year period is an arbitrary figure).
- c Those who have received frequent blood transfusions or other parenteral procedures such as haemodialysis patients and haemophiliacs.
- d Institutionalised subjects such as those with Down's syndrome, mental retardation and prison inmates.
- e Close family contacts of known cases of hepatitis B, such as children of carrier mothers.
- f Patients on immuno-suppressive drugs.
- g Recent immigrants from South East Asia.
- h Patients with defects in their immune mechanisms.
- i Drug addicts.
- j Known practising male homosexuals and prostitutes.

Patients in those categories should be tested for HB_sAg, anti Hb_s and anti HB_c.

Hepatitis B Vaccination

It seems reasonable to suggest that all dentists, dental assistants and dental hygienists should avail themselves of vaccination against hepatitis B, on a voluntary basis, when the vaccine becomes available. This would provide personal protection against the virus to those vaccinated and also reduce the occurrence of its spread through dental practice. Such vaccination of dental personnel would not obviate the possibility of patient-to-patient virus spread, hence would not reduce the need for good routine infection control measures in dental offices.

Precautions to be Taken by Susceptible Dental Staff Treating HBV Carriers

It is convenient to treat HBV carriers consecutively and at the end of a working day.

Common sense must be used when considering what precautions are necessary when performing specific procedures on a HBV carrier. For a cursory clinical examination, for instance, only a minimum of protection is needed (gloves, mask and appropriate sterilization of impedimenta), while the full precautions described below are indicated for treatment procedures.

1 Personal Precautions

- a The dentist and dental assistant should wear gloves, gowns, caps, masks and protective eyeglasses.
- b Thorough handwashing should be carried out subsequently, with the gloves still on and again after their removal.
- c If the skin is accidentally penetrated during a procedure, the area should be thoroughly scrubbed and washed under running water and HBIG should be given within 24 hours.

2 Equipment

- a Ultrasonic scalers should not be used and all scaling and polishing done by hand and slow speed handpieces.
- b If possible turbine drills should not be used. If it is considered necessary to use them, this should only be done in a closed room.
- c As much disposable equipment as possible should be used.

3 Sterilisation of Equipment and Facilities

- a All hand instruments should be autoclaved (121°C for 15 minutes) prior to washing and cleaning. They should be transported to the autoclave if it is housed in a separate room, in closed plastic bags.
- b Handpieces and other rustable items should be sterilized in a hot air oven at 150° for one hour.
- c Protective clothing, towels, swabs, etc should be sealed in a plastic bag and either autoclaved prior to cleaning and laundering or, if disposable, should be incinerated.
- d Working surfaces and fixed equipment should be swabbed with a two per cent solution of hypochlorite antiseptic (Chlorox or Javex are suitable and readily available). Equipment susceptible to rusting should be swabbed with glutaraldehyde ("CIDEX").
- e Floors and walls adjacent to the operating area should be swabbed with hypochlorite.

Staff performing the above cleaning duties should wear masks and gloves.

Precautions to be Taken by Hepatitis Immune Dental Staff

When it is known that the dentists and dental assistants treating HBV carriers are themselves immune to infection through previous exposure to the disease or vaccination, the objective of precautions is to minimize the chance of transmission to other patients treated subsequently in the same facilities and to office cleaners.

1 Personal Precautions

- a There is no requirement for masks, gloves or caps but a protective gown should be worn to avoid contamination of the personal clothing of the dentist and assistant.
- b Thorough handwashing under running water should be routinely practised.

2 Equipment

Creation of aerosols should be avoided by minimizing the use of turbine drills and ultrasonic cleaners and these should only be used in closed rooms.

3 Sterilisation of Equipment and Facilities

The same procedures as described above should be used prior to using the facilities for hepatitis B susceptible patients.

Precautions to be Taken by Dentists or Dental Assistants or Dental Hygienists who are HBV Carriers

Dentists who are HBV carriers should wear gloves and masks at all times while practising their profession, and should change these between patients. They should be monitored regularly by their personal physician who should preferably be an internist and ideally a gastroenterologist.

It seems reasonable to assume that there is considerably less likelihood of dentist-to-patient transmission if these simple precautions are followed than patient-to-dentist transmission, as it is seldom that the dentist's blood or saliva are spilt over the skin, mucosa or conjunctiva of a patient. Gloves should prevent spread via blood from minor abrasions and masks should prevent droplet transmission.

Precautions to be taken with Patients with a history of Non A, non B Hepatitis

As the carrier state in this disease cannot at present be recognised, the precautions outlined above for susceptible dental staff treating HBV carriers should be observed for all patients with a history of non A, non B hepatitis. Hepatitis B vaccine does not protect against non A, non B hepatitis.

PERSONAL EXPERIENCE

Using the precautions described above for hepatitis B susceptible dental staff in two of the University of Toronto teaching hospitals (Mount Sinai Hospital and Sunnybrook

Medical Centre) over the last eight years, many hundred HBV carriers have been given full dental care without, so far as is known, any transmission of the disease having occurred. In both hospitals all dental staff engaged in treatment of HBV carriers have been tested annually for HB_sAg and anti HB_s and no cases of changes in serology have been found. It is more difficult to report with certainty that no susceptible patients using the same dental treatment facilities have developed the disease. However no such cases have been discovered.

While the recommended precautions are not technically difficult or complicated, they are time consuming particularly for the assisting staff. It is therefore recommended that HBV carriers should be treated by hepatitis B immune dental staff in a centralized facility. While only HBV carriers are being treated in this facility, the necessary precautions are little more than are needed under normal circumstances in a dental office. Only when the facilities are to be used for treating susceptible patients need the equipment and room be fully sterilized. This system of provision of dental care for HBV carriers has been recommended for adoption by a number of authorities^(15, 17). A clinic staffed in this way is operating in Sunnybrook Medical Centre and we would suggest that wherever there is a sufficient patient pool of HBV carriers to justify it, such a dental care facility should be established.

One of us (M.M.F.) has advised three dentists who are HBV carriers on appropriate precautions to enable them to carry on clinical practice and avoid transmission. Using the relatively simple measures described above, no cases of transmission are believed to have occurred.

We do not believe that adoption of the precautions recommended above will prevent all cases of transmission of hepatitis B via dental practice but our experience sustains us in the belief that they will minimize it. Hepatitis B vaccination of all dentists will greatly simplify the precautions that need to be taken to minimize viral spread but will not eliminate them and even then, it will still be highly desirable to know when an HBV carrier is being treated. The problems of spread of non A, non B hepatitis and of other viral diseases through dental treatment facilities will remain.

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Programs accredited by CDA during 1982

Programmes agréés par l'ADC en 1982

The following programs received accreditation from the Canadian Dental Association during 1982.

DENTAL UNDERGRADUATE PROGRAMS PROGRAMMES DENTAIRE DU PREMIER CYCLE

University of British Columbia
University of Alberta
University of Saskatchewan
University of Manitoba
University of Western Ontario
University of Toronto
Université de Montréal
McGill University
Université Laval
Dalhousie University

DENTAL SPECIALTY PROGRAMS PROGRAMMES DE SPÉCIALITÉS DENTAIRE

Oral Pathology/Pathologie buccale

University of Toronto
University of Western Ontario

Oral Surgery/Chirurgie buccale

Dalhousie University
McGill University
University of Toronto
University of Manitoba
Université Laval

Orthodontics/Orthodontie

Université de Montréal
University of Toronto
University of Western Ontario
University of Manitoba
University of Alberta

Paedodontics/Pédodontie

Université de Montréal
University of Toronto

Periodontics/Parodontie

University of Toronto
University of Manitoba
University of British Columbia
Dalhousie University

En 1982, l'Association dentaire canadienne a agréé les programmes suivants.

DENTAL HYGIENE PROGRAMS PROGRAMMES D'HYGIÈNE DENTAIRE

University Programs/Programmes universitaires

University of British Columbia
University of Alberta
University of Manitoba
Dalhousie University

Community College Programs/Programmes des collèges communautaires

Algonquin College, Ottawa, Ont.
Canadian Forces, CFB Borden, Ont.
Collège de Maisonneuve, Montréal, Qué.
Collège Régional Bourchemin, St. Hyacinthe, Qué.
Édouard Montpetit, Longueuil, Qué.
François-Xavier Garneau, Québec, Qué.
George Brown College, Toronto, Ont.
John Abbott College, Montréal, Qué.
Seneca College, Toronto, Ont.
Wascana Institute, Regina, Sask.

DENTAL ASSISTING PROGRAMS PROGRAMMES DES ASSISTANTS DENTAIRE

Algonquin College, Ottawa, Ont.
Canadore College, North Bay, Ont.
Canadian Forces, CFB Borden, Ont.
Confederation College, Thunder Bay, Ont.
George Brown College, Toronto, Ont.
Holland College, Charlottetown, P.E.I.
Keewatin College, The Pas, Manitoba
Kelsey Institute, Saskatoon, Sask.
Malaspina College, Nanaimo, B.C.
New Caledonia, Prince George, B.C.
Nova Scotia Institute of Technology, Halifax, N.S.
Northern Alberta Institute of Technology, Edmonton, Alta.
Seneca College, Toronto, Ont.
Southern Alberta Institute of Technology, Calgary, Alta.
Okanagan College, Kelowna, B.C.
Red River College, Winnipeg, Man.
Vancouver Vocational Institute, Vancouver, B.C.
Wascana Institute, Regina, Sask.

Annual meeting of the CDA Board of Governors

CDA Executive Director Hubert Drouin has prepared the following report of highlights of the annual meeting of the Canadian Dental Association's Board of Directors.

The annual meeting of the Canadian Dental Association was held in Ottawa, September 24 and 25. It is believed this is the first time the meeting has been held outside the annual CDA convention period which this year was conducted in conjunction with the Ontario Dental Association, May 9 to 12 in Toronto.

Dr. Nick Mancini of Hamilton chaired the 27 member Board which elected a slate of officers, appointed auditors and conducted the business of the Association.

The following covers some of the highlights of the two day session.

SALARIED DENTISTS

Following a report by an ad hoc study group on membership services for salaried dentists, the Board of Governors agreed that salaried dentists should be encouraged to form their own group and that a committee be established to further delineate the concerns of salaried dentists and to offer recommendations.

MANPOWER STUDY

The \$35,000 manpower study now being conducted nation-wide by R.K. House and Associates will be completed in time for presentation to the March meeting of the Board. A progress report was provided for this meeting.

The study is examining dental manpower to identify critical oversupply in order to assist CDA and the provincial associations to determine required action.

CDSPI

As CDSPI is an integral component of the Canadian Dental Association,

the CDA Board, as is its annual practice, appointed CDSPI Board of Directors the CDA Council on Insurance and Investments for 1983. CDA's representatives to the CDSPI Board of Governors for the same period are Dr. R.L. Moran, Ontario and Dr. R. Dupont, Québec.

The Board approved an eligibility definition for participation in CDSPI insurance programs. Present participants who do not meet the eligibility requirements will be notified by registered mail.

Eligibility Definition

"Eligible Member" means a dentist who is licensed or possesses a certificate to practice dentistry in a province or territory of Canada who is a member of the Canadian Dental Association and/or a participating provincial dental association;

"Designated Eligible Member" means a person who is in any of the following categories and who is designated as a Designated Eligible Member by the Canadian Dental Association:

- (a) individuals who are employed by an Eligible Member or by any participating Dental Association;
- (b) full-time students and graduate students in a school or faculty of dentistry who are members in good standing of either the CDA or a participating provincial dental association;
- (c) any other individuals named by the Canadian Dental Association as Designated Eligible Members in respect of the Plan."

CDSPI coverage under the Malpractice Insurance will be increased to \$2,000,000 for any one claim from the previous \$1,000,000. The maximum annual aggregate limit will how-

ever remain at \$3,000,000. The annual premium for this excess is to be \$28.75 and will become effective January 1, 1983.

In addition, CDSPI is investigating special rates for implementation of a plan for non-smokers in relationship to the life insurance component of the program.

The Board approved a new logo for CDSPI, for the Canadian Dentists Insurance Program and the CDA Retirement Savings Plan. A new slogan to be printed on all letterhead and on the front of all CDSPI written material which reads "programs co-sponsored by your national and provincial association" was also approved.

FINANCES

The Board approved the budget for 1983 which projects a respectable "excess of revenue over expenditures" of approximately \$111,755.00. In order to maintain this level of good financial planning, to offset increasing costs arising from inflation and to retain effective programs, a small membership fee increase of \$25.00 for active and affiliate membership dues, to become effective in 1984, has been approved. That increase will be prorated for the other membership categories.

The student membership fee has been increased to \$12.00 for the 1982-83 academic year.

The firm McCay-Duff & Company was appointed auditors for the 1982 fiscal year.

EDITORIAL BOARD

The functions of the Editorial Board and Editorial Staff of the Journal of the Canadian Dental Association have been more clearly delineated to improve the overall operation of the publication. The responsibility of the Editorial Board is to develop guidelines for the manage-

Continued on next page

ment of the Journal and its advertising content.

The Board will include four dentists, the Director of Communications and the Editor. The four dentists will be appointed annually by the Executive Council to a maximum of six years, one of whom will be appointed chairman on an annual basis by the President.

Members of the new Board are Chairman Dr. A.E. MacLeod, Nova Scotia; and members Dr. J.D.R. Grier, British Columbia; Dr. A.D. Sparrow, Alberta; and Dr. M.D. Klotz, Ontario.

SPECIALTY SECTIONS — MEMBERSHIP STATUS

The question of mandatory membership in CDA by members of Specialty Sections was received by the Board. While the Board agreed to remove the mandatory membership requirement for Specialty Section Status from the CDA By-laws, it provided that only active members of CDA shall be eligible to serve as representatives to the CDA. The Council on Constitution and By-Laws will prepare new draft by-laws for Specialty Sections for Board consideration.

PRODUCT ACCEPTANCE COMMITTEE

The CDA Seal of Recognition has been awarded to Beecham Canada Inc. for Macleans toothpaste.

Other dentifrices and a mouthwash which are covered by the endorsement program are: Beecham Canada Inc. — Aquafresh toothpaste, Colgate Palmolive Canada — Colgate toothpaste, Lever Detergents Limited — Aim toothpaste, Procter & Gamble Inc. — Crest toothpaste and Warner-Lambert Canada Limited — Listermint with fluoride mouthwash.

MEMBERSHIP COMMITTEE

Concern has been expressed about the loss of many new graduate students who fail to join their national organization in the two voluntary provinces. Graduates in Ontario and

Québec who have qualified for the student graduate package will be allowed to pay their CDA membership fee in two equal instalments the first year after conversion from student membership.

In order to provide goods and services on a more equitable basis to CDA members, the Board agreed that, with certain exceptions due to economic reasons, access to goods and services would bear a differential of up to 50 per cent for non-CDA members. This action would affect the cost of pamphlets, Resource Centre services, bulletin mailouts, etc.

CDA/ODA 1982 CONVENTION

Following a report on the success of the conjoint CDA/ODA convention in Toronto May 9-12, the Board unanimously endorsed the recommendation that "the Canadian Dental Association express sincere thanks to the Ontario Dental Association for the organization of an outstanding joint convention in 1982."

Plans for the 1983 convention in Vancouver September 25-28 are well underway under the chairmanship of Dr. T.E. Ramage. The Board Governors' meeting will precede the convention to be held September 23-24 in Vancouver.

OFFICE AUTOMATION

The Board approved the purchase of word processing equipment for the CDA office. The first application will be membership information management.

COUNCIL ON DENTAL MATERIALS AND DEVICES

As reported following the interim Board meeting in March, the Council on Dental Materials and Devices is continuing to develop a certification program for dental products with the Canadian Standards Association. CDA continues to assist with "bridge" funding.

The annual grant of \$8,400 has been allotted to the Canadian Standards Association for one further year

in the program for the preparation of dental standards.

CDRF AWARD

The Canadian Dental Research Foundation award for 1982 was presented to Dr. C. Birek of the University of Toronto for her paper "Dome Formation by Oral Epithelia in Vitro."

The CDRF institutional trophy was presented to Dr. Jane Aubin representing Dean Ten Cate from the University of Toronto. The trophy will remain at the University for one year.

To encourage greater participation in applications for the CDRF award, the eligibility date has been extended to include the year following graduation.

COUNCIL ON EDUCATION

The Board considered several recommendations from the Council regarding policy changes in the internship, residency and auxiliary programs. The first two items were referred to an ad hoc committee for review, and the latter to the Council for further study and action.

The fee for the Dental Aptitude Test for the 1982-83 academic year has been set at \$50.00.

COUNCIL ON HEALTH CARE

The Guidelines for the Dental Health Plans for Children were approved as a policy statement for national guidelines, as follows:

"Guidelines — Dental Health Plans for Children"

The highest quality dental service the nation's resources can provide should be made available to Canada's children. Implementation of the following guidelines, recommended by the Canadian Dental Association, will help to assure the availability of this high quality dental health care.

1. The major emphasis of any plan and its highest priority should be given to its educational and preventive components.

2. Fluoridation of communal water supplies to controlled levels should be mandatory. Fluoridation is a safe, inexpensive and proven public health measure that can reduce by half the incidence of dental caries and the need for dental treatment.
3. The plan should provide comprehensive coverage up to age 18.
4. Patients should be free to choose their own dentist without losing the financial credits provided by the dental plan.
5. The plan should utilize practitioners engaged in private practice.
6. A licensed dentist must assume the ultimate responsibility for the dental services for the patient, and the competent performance of all dental services rendered at his/her direction.
7. The delegation by the dentist of intro-oral procedures to formally qualified dental auxiliaries should take place only after the diagnosis and treatment plan have been determined by the dentist.
8. Intra-oral procedures rendered by qualified dental auxiliaries should be performed only under the supervision of the dentist, as defined by the provincial dental licensing authorities.
9. Regular recall appointments, usually semi-annual, should be included as a prescribed part of the plan. When making the recall examinations, the dentist should give emphasis to the diagnosis and prevention of all aspects of oral disease and abnormality.
10. Diagnostic, preventive and treatment services should be readily available to children with handicapping conditions.

The service should be performed by or under the supervision of a dentist, and when indicated, the services should be provided in an environment suited to the specific needs of the child.

11. In order to minimize dental problems resulting from participating in sports, CSA approved face protective devices are recommended.
12. Systems of cost accounting and gathering dental health statistics should be instituted as integral parts of the plan for purposes of comparison and control.

COUNCIL ON HOSPITAL SERVICES

The Council on Hospital Services carried out a survey on dental care available to patients in long term care institutions, the completion of which showed a distinct lack of dental care available. The Board was asked to address this matter and provide the required stimulus to remedy the situation.

A draft of guidelines for sterilization procedures was prepared which will be considered by the Executive Council.

Surveys of Dental Services and/or Internship/Residency Programs at 10 hospitals are scheduled to be completed by the end of 1983 and eight surveys are scheduled for 1984, with the possibility of several new programs being added to that number.

EXECUTIVE COUNCIL

The Board is pleased to name the 1982/83 Executive Council as follows:

Dr. W.R. Thompson — President, CDA-Ontario
Dr. D.E. Williams — Past President, CDA-New Brunswick
Dr. R.N. Hicks — President-Elect, CDA-British Columbia

Dr. T.E. Ramage — British Columbia

Dr. D.L. Thompson — Alberta

Dr. P.R. Crawford — Manitoba (Prairie Provinces)

Dr. B.W. Holmes — Ontario

Dr. J. Laporte — Québec

Dr. J. Robertson — Prince Edward Island (Atlantic Provinces)

The Board acknowledged with heartfelt appreciation the major contribution to dentistry of Dr. G.E. Utas who completed his term as Immediate Past President and his term on the Executive Council and the Board.

Grateful thanks was also extended to Dr. R.D. Sexton for the term he just completed representing the Atlantic Provinces on Executive Council.

CFDE

Dr. David Peters has been named Chairman of the Canadian Fund for Dental Education. He succeeds Dr. James A. Guest. The CFDE representative from the Atlantic Provinces is Dr. Gerald Barrett and the Ontario representative is Dr. S. Golden.

Reports were submitted from all CDA committees and Councils, related organizations and most of the specialty sections.

The Council on Information Services reported a very successful National Dental Health Month program, an equally successful media workshop held in Manitoba with another one planned for the Atlantic Provinces, and a pamphlet program which is now distributing close to half a million English and French pamphlets a year.

The Taxation Committee spearheaded by the President was continuing its lobby against the Federal proposal to remove dental plan premiums from their tax exempt status as an employee benefit. The final salvo was a brief to the Standing Committee on Finance, Trade and Economic Affairs on the taxation of dental premiums in September, and copied to every Member of Parliament.

Dr. David Peters named chairman of CFDE

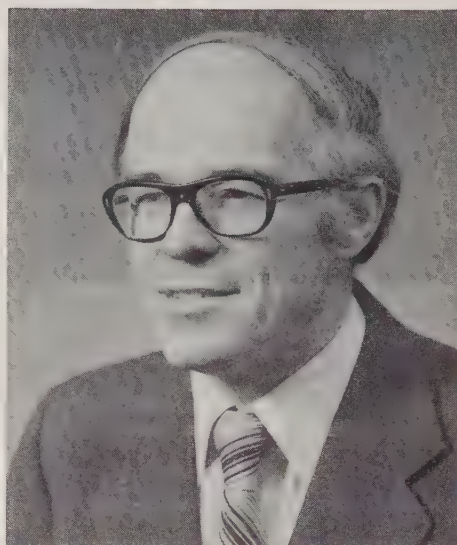
A former president of the Canadian and Newfoundland Dental Associations is the new chairman of the board of trustees of the Canadian Fund for Dental Education.

Dr. David Peters of St. John's, Newfoundland, was officially appointed to the position, succeeding Dr. James A. Guest, at the CDA Board of Governors annual meeting in September.

Dr. Peters served CDA as president in the 1972-73 term, as a member of the Board of Governors from 1965 to 1974, on the Executive Council from 1970 to 1974 and represented the CDA at the Fédération Dentaire Internationale from 1972 to 1974.

During his term as president of the CDA, the Capital Fund of CFDE was established.

He was president of the Newfoundland Dental Association in 1958 and



Dr. David Peters

served as registrar of the Newfoundland Dental Board from 1968 to 1977.

Since graduation from Dalhousie University's Faculty of Dentistry in 1950, Dr. Peters has conducted a

private practice in St. John's. He is a Fellow of the International College of Dentists, a former member of the Provincial Health Council of Newfoundland and was CDA's representative to the Standards Council of Canada from 1972 to 1978. During the past three years, he has represented the Atlantic provinces on the CFDE board.

Dr. Peters said he is concerned that "the contributions by dentists (to the Fund) have not increased as rapidly as contributions from industry. I would like to see the dentists' contributions increase because we have some worthy causes to support."

Dr. Gerald Barrett of Charlottetown, P.E.I., has replaced Dr. Peters as Atlantic provinces' representative on the CFDE board. Dr. Sydney Golden of Toronto, Ontario is the board's new trustee for Ontario.

Officers elected at Newfoundland Convention



Officers of the Newfoundland Dental Association elected at the annual convention of the NDA at Gander, on October 15, posed for this photograph following their meetings. They are, left to right: Dr. Paul O'Brien, St. John's, second vice-president; Dr. Toby Gushue, St. John's, executive secretary; Dr. Dan Green, Placentia, first vice-president; Dr. Gary MacDonald, St. John's, president (for a second term), and Dr. Gordon Anthony, St. John's, CDA governor. Missing when the photo was taken, Dr. Robin Gamble, St. John's, treasurer.

(Photo courtesy of Gander Beacon, per Iris Warren).

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Diagnosis via satellite TV — a tool of the future

Teaching and diagnosing dental diseases via satellite hookups between dental schools and hospitals is gaining acceptance as a valuable tool of the trade.

The universities of British Columbia, Western Ontario, Toronto and Memorial (St. John's, Newfoundland) have embraced this space age delivery of health care and hope to expand the capabilities of the system in the years to come.

Memorial University's use of telecommunications in the health and education fields as a teaching/diagnostic tool has been extensive over the past decade, but UBC, U of T and UWO are relative newcomers to the field.

UBC hooked up with several hospitals in that province by satellite, including Vancouver General Hospital, during the past summer, and the system transmitted its first medical case late in October.

It is currently being used by the Faculty of Medicine but UBC intends to broaden the use of the system to include all health sciences, particularly dentistry.

Dr. G. S. Beagrie, dean of the Faculty of Dentistry, said the faculty hopes to use the satellite to conduct teaching sessions and aid students to correctly diagnose oral diseases and problems.

Diagnosis of TMJ dysfunctions, facial trauma and pain, and a variety of other complicated oral disorders, is possible via a satellite system linkup with rural areas, said Dr. Ralph Brooke, dean of the dental faculty at the University of Western Ontario.

"One can get a reasonably good intra-oral picture," and the system can be an effective teaching tool, he said.

Several medical consultations have been accomplished using this system, and the dental faculty hopes to get involved in the very near future.

During the past summer, UWO and University Hospital in London, Ont., linked up with two Northern Ontario hospitals for a series of experimental transmissions. Called the Telehealth hookup, the project was designed to provide health care expertise in remote areas where specialists, such as psychiatrists and radiologists, are in short supply, explained Dr. John Mount, a psychiatrist at University Hospital who is also Director of Telecommunications for the health sciences disciplines at UWO.

Although there are no plans to continue this satellite hookup because of the expense and complications, Dr. Mount said UWO plans to expand its other network which links up University Hospital and Woodstock General Hospital. The network isn't as complicated as the experimental satellite hookup to Northern Ontario, which involved "the most developed system ever used in Canada, using two-way live color" technologies. The system involved a combination of two-way video and audio links with Sudbury and one-way video transmission and two-way audio, using the Anik B satellite, with North Bay.

Proposals to expand the Woodstock system to include two or more UWO teaching hospitals and two community hospitals in southwestern Ontario have been prepared for the Ontario Ministry of Health, which funded the original Woodstock hookup.

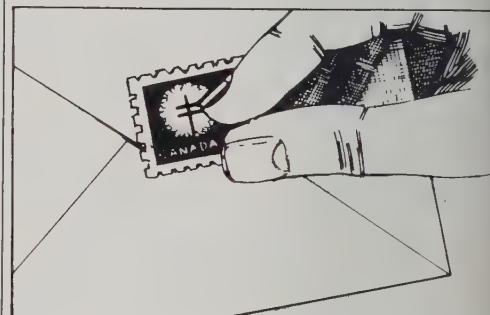
Tele-medicine, involving a mix of technologies — the University of Toronto uses a black and white telephone linkup with Sioux Lookout — is a "very exciting" field, Dr. Mount said.

Dentists have not used the satellite networks at either the University of Toronto or Memorial, which does not have a dental faculty. U of T's dental school does not plan to use the facil-

ities in the near future, because of current budget restrictions, said Dr. A.R. Ten Cate, dean of the faculty.

At Newfoundland's Memorial University, the Anik B satellite has been used to transmit documentation of specific medical cases. The university's telemedicine group has also participated actively in Canada's space research programs.

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Sponsoring Institution/Address	Location of Course	Title of Course	Subject Area	Date	Style	Instructor(s)	Registration	Fee	Audience	Contact Person/Telephone
University of British Columbia	UBC, Vancouver, B.C.	Composite Resin Restorations — A Materials Techniques Update		Feb. 5, 1983		Dr. Ron Jordan				Continuing Education in the Health Sciences, Continuing Dental Education, (604) 228-2626
"	"	Annual Vernon Ski Seminar		March 5-7, 1983						"
Manitoba Dental Association/ Faculty of Dentistry, University of Manitoba	Faculty of Dentistry, University of Manitoba	Computers in the Dental Office		Jan. 8, 1983		Dr. F. Chebib				Dr. Tom Dobbs, MDA, (204) 942-5211; or Dr. Lindsay Gibson, Faculty of Dentistry, (204) 786-3716 or 786-3652
"	"	Minor Oral Surgery		Jan. 10-13, 1983		Dr. J. Curran			rural practitioners	"
"	"	Office Emergencies		Jan. 15, 1983		Dr. R. Boyar				"
"	"	Pedodontics		Jan. 29, 1983		Dr. Robert Diamond				"
"	"	Advanced Resins for Restorative Dentistry and Cosmetic Surgery		Feb. 12, 1983		Dr. A. Louka				"
"	"	Dentistry for the Handicapped		Feb. 26, 1983		Dr. Ron Boyar				"
"	"	Amalgam-Current Status and Concepts		March 26, 1983		Dr. A. Louka				"
Manitoba Dental Association	International Inn, Winnipeg, Manitoba	Dental Materials		Feb. 4-5, 1983 (MDA Annual Meeting)		Dr. Ralph Phillips				Dr. Tom Dobbs, MDA, (204) 942-5211
"	Marlborough Hotel, Winnipeg, Manitoba		MDA 100th Anniversary Celebrations	May 6-7, 1983						"
Manitoba Dental Hygienist's Association	Faculty of Dentistry, University of Manitoba	TMJ		April, 1983 (TBA)		Dr. S. Borden				Ms. Maureen Penner, MDHA, (204) 888-2555
"	"	Issues of Child Development		April 9, 1983		Mrs. R. Vodrey				"
The University of Western Ontario	London, Ontario	The "Cast Etch" Bridge — The State of the Art	Prosthodontics (Fixed)	Jan. 21, 1983	Lecture/Demonstration	Dr. D.R. Gratton	Limited to 30	\$150.00	general practitioners, lab technicians	Mrs. M.J. Wiersma, (519) 679-2862
"	"	Periodontics I: Treatment of Periodontal Disease	Periodontics	Jan. 28, 1983	Lecture	Dr. J.D. Awde	open	\$100.00	general practitioners	"

"	"	Occlusion II: A Gnathologic Waxing Course	Occlusion	Feb. 4,5 1983	Lecture/ Demonstra- tion/Partici- pation	Drs. W.R. Teteruck and D.R. Gratton	Limited to 16	\$250.00	general practi- tioners, lab technicians	"
"	"	Articulation of Artificial Teeth for Complete Dentures Using Semi-Adjustable Instrument	Prosthodontics (Removable)	March 25- 26, 1983	"	Drs. D.H. Charles and P.S. Sills	Limited to 20	\$200.00	"	"
"	"	Removable Par- tial Dentures	"	March 31, April 1-2, 1983	"	"	Limited to 24	\$250.00	"	"
"	"	Basic Cardiac Life Support (CPR) and a Review of Emergency Drugs	Oral Medicine	April 9, 1983	"	Dr. I.D.F. Schofield or Dr. A. Parnell	Limited to 20	\$100.00	general practi- tioners	"
"	"	Magic Shadows: Panoramic Dental Radiology	Oral Radiology	April 13, 1983	Lecture/ Demonstra- tion/Partici- pation	Drs. R.G. Stephens and J.A. Reid	"	\$115.00	"	"
"	"	Pharmacology in Pedodontics	Pedodontics	April 14, 1983	Lecture	Dr. G.Z. Wright	open	\$60.00	"	"
"	"	Electrosurgery in General Practice	Periodontics/ Prosthodontics (Fixed)	April 15, 1983	Lecture/ Demonstra- tion/Partici- pation	Dr. D.R. Gratton	Limited to 15	\$175.00	"	"
"	"	Complete Dentures Today	Prosthodontics (Removable)	April 29, 1983	Lecture	Drs. P.S. Sills and D.H. Charles	open	\$100.00	"	"
"	"	Participation Course for Laboratory Tech- nicians: Fabrica- tion of the Cast Etch Bridge	Prosthodontics (Fixed)	"	Lecture/ Demonstra- tion/Partici- pation	Drs. D.R. Gratton and W.R. Teteruck	Limited to 15	\$175.00	lab technicians	"
"	"	Occlusal Correc- tion, Natural Dentition, Part I, Treatment of TMJ Dysfunction	Occlusion	May 16-20, 1983	"	Dr. D.H. Moore	Limited to 4	\$600.00	general practitioners	"
"	"	Practice Administration in the 80's	Practice Management	June 10-11, 1983	Lecture	Dr. R.A. Brandon	open	\$200.00	general practi- tioners, assistants, hygienists, other	"
Continuing Dental Education, Faculty of Dentistry, McGill University	Montreal, Quebec	Radiology and Radiation Thera- py — Your Patient	Oral Radiology	Jan. 28, 1983	"	Drs. C. Freeman and M. Tyler	"	\$40.00	general practitioners	Mrs. Olga Chodan, (514) 392-4921
Continuing Education in Dentistry, Dal- housie University	Halifax, Nova Scotia	Oral Surgery Clinical Experience	Oral and Maxillofacial Surgery	to April, 1983 (Weekly)	"	Dr. D.S. Precious	open to one person per week	\$425.00	"	Ms. Kaileen Vaison, (902) 424-2248
"	"	Fixed Partial Dentures	Prosthodontics (Fixed)	Feb. 14- 15, 1983	Lecture	Drs. Legatto & Gelfant	open	\$160.00	general practi- tioners, special- ists, assistants, hygienists, lab technicians	"

"	"	Partial Denture Design & Treatment	Prosthodontics (Fixed, Removable)	March 25-26, 1983	"	Dr. Grasso	open	"	"	"	"
"	"	Review Course for Oral & Maxillofacial Surgeons	Oral & Maxillofacial Surgery	April 18-22, 1983	"	Drs. Doug Paterson, Chris Soder, Simon Weinberg, David Precious, Paul Mercer, Michael Cohen & Bruce Wright	open	"	"	general practitioners, specialists	"
"	"	Post College Assembly '83	Practice Management	May 8-10, 1983	"	Dr. David Bell	open	"	"	"	"
"	"	Oral Surgery	"	Feb. 25-26, 1983	"	Drs. MacInnis & Precious	open	"	"	general practitioners, assistants, hygienists	"
"	"	Corner Brook, Newfoundland	"	"	"	"	"	"	"	"	"
"	"	Dalhousie University/ Newfoundland Dental Association	"	"	"	"	"	"	"	"	"

Motrin[®]

(ibuprofen) tablets

Product Information

Action: Ibuprofen has demonstrated anti-inflammatory, analgesic and antipyretic activity in animal studies designed to specifically demonstrate these effects. Ibuprofen has no demonstrable glucocorticoid effect.

Following a single 200 mg dose of ibuprofen in humans, useful blood levels were demonstrable in 45 minutes and still present in six hours but at barely detectable levels. Peak levels occurred at approximately one hour after ingestion. Levels were lower when taken in conjunction with food.

Ibuprofen is rapidly metabolized and eliminated in the urine. The excretion of ibuprofen is virtually complete 24 hours after the last dose. The serum half-life of ibuprofen is 1.8 to 2 hours. There is no evidence of drug accumulation or enzyme induction.

Ibuprofen has been found to be less likely to cause gastro-intestinal bleeding in doses usually used than is acetylsalicylic acid.

Clinical trials in man have shown activity of a dose of 1200 - 1800 mg of ibuprofen daily to be similar to that of 3.6 grams of acetylsalicylic acid daily.

Indications and Clinical Uses: Motrin (ibuprofen) is indicated for the treatment of rheumatoid arthritis and osteoarthritis. Motrin is also indicated for the relief of mild to moderate pain accompanied by inflammation in conditions such as musculo-skeletal trauma and post-dental extraction. Motrin is also indicated for the relief of pain associated with dysmenorrhea.

Contraindications: Motrin (ibuprofen) should not be used in patients who have previously exhibited hypersensitivity to it, or in individuals with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to acetylsalicylic acid or other nonsteroidal anti-inflammatory agents. (see WARNINGS)

Motrin should not be used during pregnancy, in nursing mothers or in pediatric patients because its safety under these conditions has not been established.

Warnings: Anaphylactoid reactions have occurred in patients with known A.S.A. hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported in patients receiving Motrin (ibuprofen). Peptic ulceration, perforation, or severe gastrointestinal bleeding can have a fatal outcome, and although few such reports have been received with Motrin, a cause and effect relationship has not been established. Motrin should be given under close supervision to patients with a history of upper gastro-intestinal tract disease.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in colour vision have been reported. If a patient develops such complaints while receiving Motrin (ibuprofen), the drug should be discontinued and the patient should have an ophthalmologic examination. Fluid retention and edema have been reported in association with Motrin; therefore, the drug should be used with caution in patients with a history of cardiac decompensation or renal disease.

Motrin, like other nonsteroidal anti-inflammatory agents, can inhibit platelet aggregation but the effect is quantitatively less and of shorter duration than that seen with acetylsalicylic acid. Motrin has been shown to prolong bleeding time (but within the normal range) in normal subjects. Because this prolonged bleeding effect may be exaggerated in patients with underlying hemostatic defects, Motrin should be used with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients on Motrin should be cautioned to report to their physicians signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

When Motrin is added to the treatment program of patients who have been on prolonged corticosteroid therapy, and it is decided to discontinue this therapy, the corticosteroid should be tapered slowly to avoid exacerbation of disease or adrenal insufficiency.

Aseptic meningitis has been reported in connection with Motrin therapy in patients with systemic lupus erythematosus. Such patients may also develop hypersensitivity reactions to Motrin such as fever, rash or abnormal liver function more often than those with other disorders. Caution should therefore be exercised when considering Motrin therapy for patients with systemic lupus erythematosus.

Drug Interactions

Coumarin-type anticoagulants: Several short-term controlled studies failed to show that Motrin significantly affected prothrombin times or a variety of other clotting factors when administered to individuals on coumarin-type anticoagulants. However, because bleeding has been reported when Motrin and other nonsteroidal anti-inflammatory agents have been administered to patients on coumarin-type anticoagulants, the physician should be cautious when administering Motrin to patients on anticoagulants.

A.S.A.: Animal studies show that A.S.A. given with nonsteroidal anti-inflammatory agents including Motrin yields a net decrease in anti-inflammatory activity with lowered blood levels of the non-A.S.A. drug. Single dose bioavailability studies in normal volunteers have failed to show an effect of A.S.A. on Motrin blood levels. Correlative clinical studies have not been done.

Adverse Reactions: The following adverse reactions have been noted in patients treated with Motrin (ibuprofen):

Note: Reactions listed below under Causal Relationship Unknown are those which occurred under circumstances where a causal relationship could not be established. However, in these rarely reported events, the possibility of a relationship to Motrin cannot be excluded.

Gastrointestinal: The adverse reactions most frequently seen with Motrin therapy involve the gastrointestinal system.

Incidence 3 to 9%: nausea, epigastric pain, heartburn.

Incidence 1 to 3%: diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the gastrointestinal tract (bloating or flatulence).

Incidence less than 1%: gastric or duodenal ulcer with bleeding and/or perforation, gastrointestinal hemorrhage, melena, hepatitis, jaundice, abnormal liver function (SGOT, serum bilirubin and alkaline phosphatase).

Central Nervous System:

Incidence 3 to 9%: dizziness.

Incidence 1 to 3%: headache, nervousness.

Incidence less than 1%: depression, insomnia.

Causal relationship unknown: paresthesias, hallucinations, dream abnormalities.

Dermatologic

Incidence 3 to 9%: rash (including maculopapular type).

Incidence 1 to 3%: pruritus.

Incidence less than 1%: vesiculobullous eruptions, urticaria, erythema multiforme.

Causal relationship unknown: alopecia, Stevens-Johnson syndrome.

Special Senses

Incidence 1 to 3%: tinnitus.

Incidence less than 1%: amblyopia (blurred and/or diminished vision, scotomata and/or changes in colour vision). Any patient with eye complaints during Motrin therapy should have an ophthalmological examination (see PRECAUTIONS).

Causal relationship unknown: conjunctivitis, diplopia, optic neuritis.

Metabolic

Incidence 1 to 3%: decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Hematologic

Incidence less than 1%: leukopenia and decreases in hemoglobin and hematocrit.

Causal relationship unknown: hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes (e.g. purpura, epistaxis, hematuria, menorrhagia).

Cardiovascular

Incidence less than 1%: congestive heart failure in patients with marginal cardiac function, elevated blood pressure.

Causal relationship unknown: arrhythmias (sinus tachycardia, sinus bradycardia, palpitations).

Allergic

Incidence less than 1%: anaphylaxis (see CONTRAINDICATIONS).

Causal relationship unknown: fever, serum sickness, lupus erythematosus syndrome.

Endocrine

Causal relationship unknown: gynecomastia, hypoglycemic reaction.

Renal

Causal relationship unknown: decreased creatinine clearance, polyuria, azotemia.

Symptoms and Treatment of Overdosage: A nineteen month old child weighing 12 kg ingested from 2800 to 4000 mg of Motrin (ibuprofen) and presented with apnea, cyanosis and responded only to painful stimuli. Oxygen and parenteral fluids were given and at 12 hours she appeared completely recovered. Two other children (10 kg each) ingested 1200 mg of Motrin each and there were no signs of acute intoxication or late sequelae. A 19 year old male who had ingested 8000 mg of Motrin reported dizziness, and nystagmus was noted. He recovered with no reported sequelae after parenteral hydration and three days' bed rest.

In cases of acute overdosage, the stomach should be emptied by vomiting or lavage, though little drug will likely be recovered if more than an hour has elapsed since ingestion. Because the drug is acidic and is excreted in the urine, it is theoretically beneficial to administer alkali and induce diuresis.

Dosage and Administration: Rheumatoid arthritis and osteoarthritis: The initial daily dosage in adults is 1200 mg divided into 3 or 4 equal doses. Depending on the therapeutic response, the dose may be adjusted downward or upward. The daily dosage should not exceed 2400 mg.

Maintenance therapy, once maximum response is obtained, will range from 800 to 1200 mg per day.

Mild to moderate pain accompanied with inflammation, dysmenorrhea: 400 mg repeated as required every 4 to 6 hours. The daily dosage should not exceed 2400 mg.

Children: Due to the lack of clinical experience, ibuprofen is not indicated for use in children under 12 years of age.

Supplied: 200 mg (yellow), 300 mg (white), 400 mg (orange) sugar-coated tablets and 600 mg (peach) film-coated tablets in bottles of 100 and 1000.

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497-7117	Metro Toronto



**Canadian
Dentists'
Insurance
Program**

Denture-marking research progressing in Canada

The problem of misplaced dentures in hospitals and nursing homes has prompted the American Dental Association to launch a campaign called "Operation IDENT."

Information will be gathered from dental societies and a report will be published explaining the techniques which dentists find most useful for making dentures.

In Canada, the idea of finding an effective way to mark dentures "keeps coming up," said Dr. Doug Chaytor, president of the Association of Prosthodontists of Canada.

He said prosthodontists working in the 10 Canadian dental schools have been toying with this idea and various

systems have been developed, including the ceramic chip technique, developed by Dr. Philip Samis, a Montreal private practitioner, in 1974. This heat-resistant ceramic microdot can be engraved and implanted under a tooth filling for quick identification of burned or mutilated accident victims.

The microdot is presently being

refined and expanded for other uses at the University of Saskatchewan, where Dean E.R. Ambrose was instrumental in getting the research project underway.

Dr. Ambrose said many denture marking systems are now available on the Canadian market and it is up to the individual to select the device he or she wants.

Obituaries/ Nécrologies

BRUNEAU, Jean: Dr. Bruneau, a member of the Canadian Dental Association, graduated from the University of Montreal in 1953. He was born in 1928.

BUTCHER, E.C.: A graduate of the University of Toronto in 1926, Dr. Butcher was born in 1901 and lived in Port Colborne, Ont. He was a life member of the CDA.

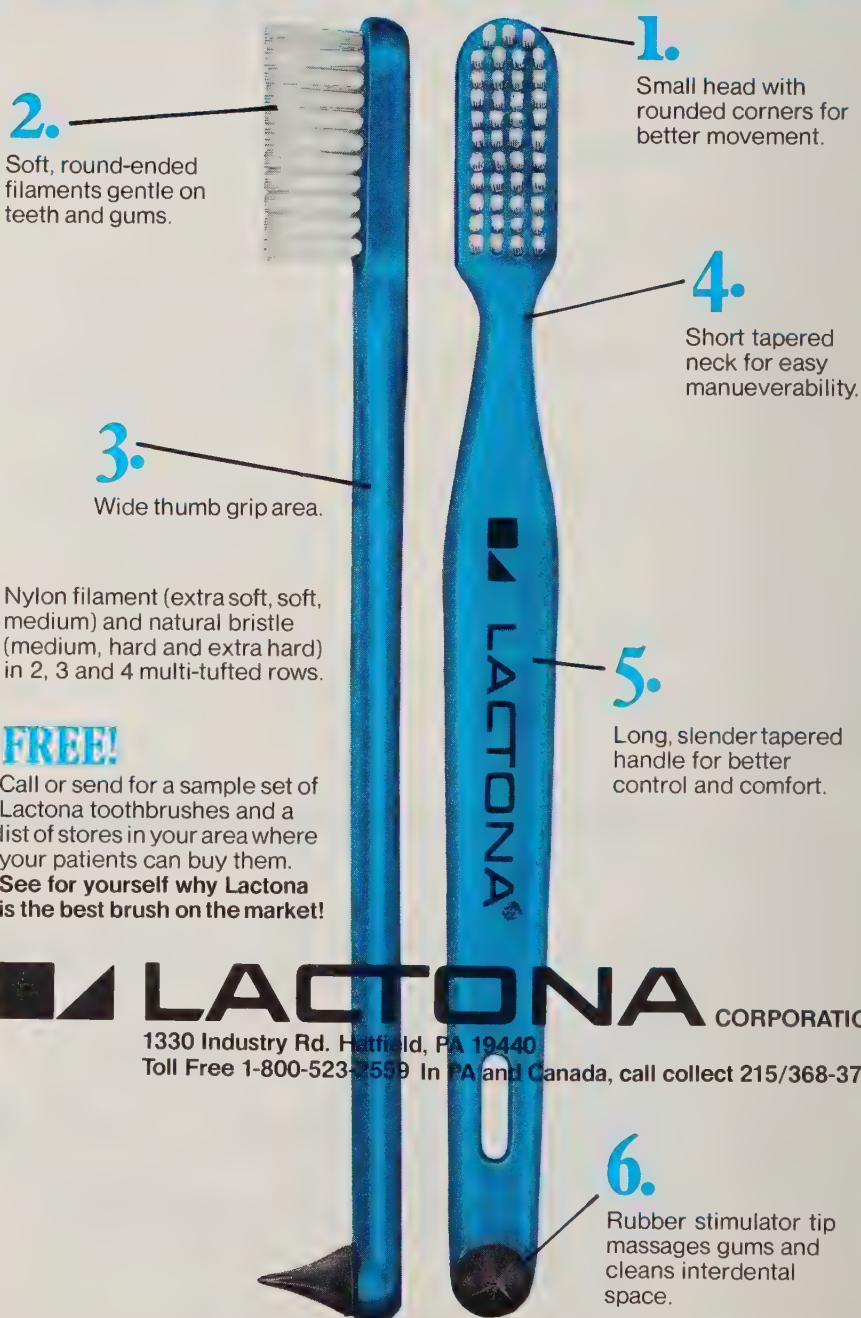
CHOLETTE, Raymond: Born in 1916, Dr. Cholette graduated from the University of Montréal in 1942.

CUCIUREAN, Jean-Luc: Gradué Université de Montréal, 1973. Née en 1948.

DUBÉ, Paul: A University of Montreal graduate in 1976, Dr. Dubé was born in 1952.

GORDON, Dora: A life member of the CDA, Dr. Gordon was born in 1907 and graduated from McGill University in 1934.

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Briefly —

With the re-election of the Hatfield government in New Brunswick in October, the New Brunswick Dental Society anticipates the government will proceed with its proposal to establish a new "umbrella" health disciplines act, to be administered by a one-man commission.

Supported by 16 other health groups in the province, the New Brunswick Dental Society is mounting its lobby against the proposed bill.

"We are counter-proposing with a bill of our own," said Dr. J.G. Thompson, Registrar of the New Brunswick Dental Society, adding that the health groups want to establish their own health disciplines act that would incorporate several senior health services representatives as a commission.

"This would be unique in Canada if it was approved," Dr. Thompson said.

The lobby by the health groups will intensify when the House reconvenes in the spring.

♦♦♦♦♦♦♦♦

The Ontario Health Ministry has revised its program offering new incentives to attract more dentists and physiotherapists to northern Ontario communities.

Dentists who agree to practise in an underserved area will now be offered a \$28,000 grant paid over four years or, as an alternative, a guaranteed minimum net income of \$35,000 a year.

The Health Ministry's Unserved Areas Program previously offered the choice of an \$18,000 incentive grant or a guaranteed income of \$28,000.

By late September, the total number of dentists working in remote northern areas of Ontario was 53.

The program, which is also open to physicians, speech pathologists and audiologists, assists communities experiencing difficulty attracting and retaining health professionals. To date, more than 700 professionals have been placed in these underserved areas.

A CDA media workshop is planned for the Atlantic provinces and will be held in Moncton, New Brunswick on January 22-23, 1983. The two interviewers, Paul McLaughlin and Patricia Lockie, who conducted the two previous workshops, are handling this one.

Other workshops were held for the CDA Executive Council on November 11-12, 1981 in Ottawa, Ontario and for the Manitoba Dental Association June 12-13, 1982 in Winnipeg, Manitoba.

Both workshops have been termed very successful. Ross McIntyre, secretary-treasurer of the Manitoba Dental Association, said "the results of the workshop are viewed by everyone as being significant, positive, valuable and worthwhile" and the MDA "enthusiastically" recommends it to others.

♦♦♦♦♦♦♦♦

Our thanks

To all those specialists who have given of their valuable time to review and occasionally revise, scientific manuscripts submitted for possible publication in the Journal of the Canadian Dental Association during the past year, the Editorial Board and the Journal's editorial staff, offer sincere thanks.

As in their other endeavors, these specialists undertake this task in a true spirit of dedicated professionalism, checking manuscripts for accuracy of content, correctness of research procedure, pointing out any ambiguities or possible areas of misinterpretation and even correcting spelling and grammatical errors.

Their role in maintaining the high standard of papers published in the Journal is played very quietly behind the scenes, but merits public acknowledgement from the Journal and the dental profession in Canada.

♦♦♦♦♦♦♦♦

Dr. Michael Eggert, Division of Periodontics, Department of Stomatology at the University of Alberta, recently received an Alberta Heritage

Foundation for Medical Research Establishment Grant of \$263,942.

The grant was given for Dr. Eggert's proposal on Immunochemical and biochemical analysis of glycoproteins and immunoglobulins in the human secretions reacting with oral bacteria.

Other Heritage grants were awarded to the Faculty of Dentistry for equipment, and studentships and fellowships for students who are full or part-time researchers. The Faculty also received several Medical Research Council grants.

♦♦♦♦♦♦♦♦

The University of British Columbia is the first dental school in the world to purchase a "simulator teaching unit" from the Morita Corporation of Japan.

The simulator will be used to teach surgical removal of impacted teeth, endodontics, pedodontics and orthodontics. Only the model settings for teaching operative dentistry and crown and bridge work are in operation now, but other models will be added in the near future.

UBC, which has been designated a World Health Organization collaborative centre, purchased the unit through a Woodward Foundation grant. Dean G.S. Beagrie has been appointed to a subgroup of the WHO Expert Panel for Oral Health to review and evaluate this training system.

♦♦♦♦♦♦♦♦

North America's first Conference on Dental Hygiene Research was held in Winnipeg, Manitoba, Sept 30 — Oct. 1.

Sponsored by the University of Manitoba's School of Dental Hygiene and Health and Welfare Canada's Working Group on the Practice of Dental Hygiene, the Conference brought together Canadian hygienists who have demonstrated an interest and participation in research, along with 14 recognized research leaders from Canada and the United States. The researchers included Colin Dawes, David Fish, Dexter Harvey and John Horne, University

Continued on next page

BRIEFLY continued

of Manitoba; the University of Toronto's Donald Lewis, Jean-Paul Lussier of the University of Montréal, John Stamm of McGill University and Ron Heacock of Health and Welfare Canada's National Health Research Development Program.

Dr. Doug J. Yeo, former chairman of CDA's Council on Education, is the new President of the Canadian section of the International College of Dentists.

The annual meeting and induction of the new Fellows will be held in Vancouver at the time of the 1983 CDA Annual Convention.

Canada's Food Guide Handbook has recently been revised and expanded to include nutritional recommendations for Canadians, nutritional education concepts to be used as a basis for teaching nutrition throughout the human life cycle and the nutritional basis for the Food Guide itself.

The nutritional recommendations include the principles of variety, energy balance and moderation which are integrated throughout the various chapters of the Handbook.

The concept of teaching nutrition throughout the life cycle includes special information for pregnant women, infants and preschoolers, adolescents, adults and older adults.

Revision of the Handbook followed informal discussions as well as formal evaluation by professionals and paraprofessionals of Canada's Food Guide materials in 1979.

The Handbook is published by the Nutrition Programs Unit, Health Promotion Directorate, Health Services and Promotion Branch, Health and Welfare Canada.

Hugh Mackenzie has been appointed to succeed Edward Pickering as chairman of the Health Disciplines Board of Ontario.

Mr. Mackenzie was a member of the first Health Disciplines Board

appointed in Ontario in 1974. He became vice-chairman in 1977 and held that position until elected chairman of the Regional Municipality of Muskoka. He has just completed a second term in that office.

The board, composed of lay people, hears appeals from the public and from health professionals on decisions made by regulatory bodies for dentistry, medicine, nursing, optometry and pharmacy. It also conducts reviews for people who have been refused a licence to practice or have had limitations placed on their practices.

The University of Alberta's Dental Alumni Association's Outstanding Achievement Award was conferred on Dr. Sperry Fraser at that association's annual banquet in Edmonton in June.

Dr. Fraser, still practising after 51 years, was born in Norwood, Ont. in 1899 and graduated from the University of Alberta in 1930 with a First Class General Standing in Dentistry. He later received degrees from the American College of Dentists (FACD) and the Royal College of Dentists (FRCD).

He is a charter member of the Canadian Academy of Prosthodontics, past president of the Pacific Coast Society of Prosthodontics and the Alberta Dental Alumni Association, and Professor Emeritus of the University of Alberta.

For the first time in a dental faculty in Québec, members of a department have chosen a woman as director.

Dr. Bélique-Nadeau is the new director of the department of stomatology of the dental faculty of the Université de Montréal. She succeeds Dr. Julien Brussi res, former secretary of the faculty and presently assistant to the dean of student affairs.

Dr. Bélique-Nadeau has worked with the faculty since 1959. After graduation in 1949, she married Professor Jean Nadeau, specialist in prosthodontics.

Her career in the faculty began 10 years later when Dean Jean-Paul Lussier invited her to assume a portion of the teaching duties in theoretical and clinical diagnostics.

She is a member of several professional organizations and societies, national and international, including the Canadian Dental Association, le Coll ge des chirurgiens dentistes du Qu bec, l'Ordre des dentistes du Qu bec, l'Association des facult s dentaires du Canada, the Canadian Academy of Oral Medicine, the Canadian Academy of Oral Pathology, l'Association internationale francophone de recherche odontologique and l'Association internationale de p dagogie universitaire.

Dr. Bernard E. White of Saskatoon was elected president of the College of Dental Surgeons of Saskatchewan at the College elections held on Oct. 19.

Dr. White, who is the first graduate of the University of Saskatchewan's dental college to become president of the College of Dental Surgeons, assumes office on January 1, 1983.

He will succeed Dr. Gregory B. White of Regina.

Dr. W.P. Reed of Regina was named vice-president for 1983.

Ms. Ingrid Kleysteuber has been appointed Executive Secretary of the Canadian Fund for Dental Education.

The announcement was made by Dr. David Peters, newly-elected CFDE board chairman.

Ms. Kleysteuber has been employed by the fund for 15 years.

Prior to her arrival in Canada in 1967 from her native Germany, she served as secretary to the Dental Director of the Bayer Company in Cologne.

In her new position, Ms. Kleysteuber will assume many of the duties previously the responsibility of Murray McDonald, who retired as Executive Director of CFDE on June 30. Mr. McDonald has agreed to continue as consultant to the Fund.

CDA Resource Centre/Le Centre de documentation

DENTAL PRACTICE MANAGEMENT

Copies of the following articles are available at no charge from the library. This bibliography was generated with the help of MEDLARS, a computerized information retrieval system for the health sciences field, which has been operational at the library since February 1982, and is at the disposal of all members.

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3. Callender, R.S. and Barbour, A. *Effective communication with clients: financial arrangements*. Journal of Clinical Orthodontics, v.15, no.7, July 1981, pp. 497-500.
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8. Danner, M.L. *Split-shift dentistry*. CAL, v.45, no.10, Apr. 1982, pp. 13-14.
9. Delaney, C.E. *Direct reimbursement — one company's experience*. Journal of the Massachusetts Dental Society, v.30, no.4,

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10. Doherty, H. and Tekavec, M. *Developing written personnel policies*. Dentalpractice, v.2, no. 4, April 1981, pp. 72 and 72-75.
11. Doherty, H. and Tekavec, M. *Group pressure can make or break your staff*. Dentalpractice, v.3, no.3, Mar. 1982, pp. 77 and 79-80.
12. Doherty, H. and Tekavec, M. *Money motivates staff performance*. Dentalpractice, v.3, no.4, Apr. 1982, pp. 24-25.
13. Domer, L.R., Gottlieb, E.L. and Johnson, D.A. *JCO orthodontic practice study*. Practice activity. Journal of Clinical Orthodontics, v.15, no.9, Sept. 1981, pp. 603-611.
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15. Domer, L.R. Gottlieb, E.L., and Johnson, D.A. *JCO orthodontic practice study. Practice staff*. Journal of Clinical Orthodontics, v.15, no.11, Nov. 1981, pp.738-747.
16. Hartley, L.S. and Scheetz, J.P. *Obtaining staff perceptions of practitioner management style*. Quintessence International, v.12, no.10, Oct. 1981, pp.1095-1100.
17. Hees, L.A. 'The check is in the mail': what you can do about

GESTION DU CABINET DENTAIRE

On peut se procurer sans frais à la bibliothèque le texte des articles ci-dessous. Cette bibliographie a été dressée grâce à MEDLARS, un système automatisé de recherche documentaire sur les sciences de la santé que la bibliothèque exploite depuis le mois de février 1982, et qu'elle met au service de tous les membres.

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18. Jacobs, B. *Are you ready for a tax audit?* Dentalpractice, v.3, no.4, Apr. 1982, pp.62, 65, 67.
19. Kellio, D. *Gross not major factor in setting practice value*. Dental Economics, v.71, no.12, Dec. 1981, pp.39-40, 42.
20. Kuhn, B.L. *Are you overlooking an important referral source — physicians?* Dental Economics, v.72, no.4, Apr. 1982, pp.91-92, 94, 96.
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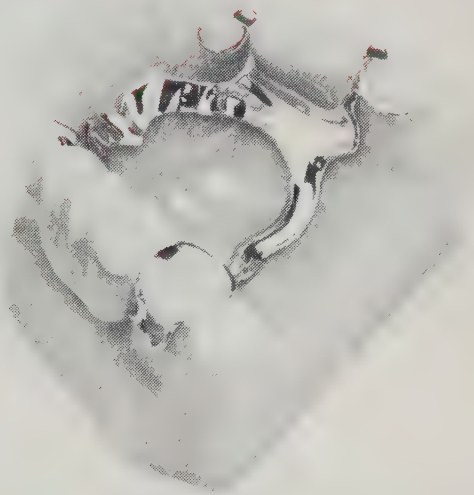
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**Le régime
d'assurance
des dentistes
du Canada**

Agrément d'un vaccin contre l'hépatite

"Le 26 octobre, 1982 l'emploi de *Heptavax B*, fabriqué par la firme *Merck Sharp et Dohme*, a été autorisé au Canada," a annoncé le Dr S. E. Acres, Chef, Division des maladies transmissibles, Bureau de l'Épidémiologie, Direction générale de la protection de la santé, Santé et Bien-être social Canada, dans une article publié dans le Rapport hebdomadaire des maladies au Canada, le 6 novembre dernier.

"Le marché canadien dispose d'un premier approvisionnement de 85 000 doses. Comme les prévisions initiales au sujet de la demande dépassaient cette quantité, les épidémiologistes provinciaux se sont réunis les 8 et 9 juillet 1982 afin de discuter des difficultés de procéder à une répartition juste et équitable.

"Il a été décidé que les doses disponibles pourraient être divisées entre les provinces et les territoires selon le nombre d'habitants. On a aussi parlé de la difficulté d'établir une liste des priorités pour les candidats à l'immunisation — d'après les risques connus d'infection pour certaines personnes et la possibilité d'une transmission plus répandue. Les recommandations des épidémiologistes sont exposées dans la déclaration qui suit.

"Tous les ministères provinciaux de la Santé n'ont cependant pas décidé d'acheter la totalité de la part qui leur avait été allouée selon le nombre d'habitants et d'en vérifier la répartition. Les provinces en question pourront se procurer des quantités suffisantes de vaccin en s'adressant directement au fabricant."

Comité consultatif de l'épidémiologie (CCÉ) Déclaration sur le vaccin contre l'hépatite B

Le Comité consultatif de l'épidémiologie est d'avis que le vaccin

contre l'hépatite virale B est un moyen efficace de réduire la propagation de cette maladie et de diminuer le risque d'infection chez les sujets qui y sont susceptibles. Les premières quantités du vaccin étant limitées, il convient d'appliquer certaines règles.

D'abord, il y a divers groupes pour qui les risques sont plus ou moins considérables et, par conséquent, le vaccin plus ou moins nécessaire.

Étant donné que la quantité de vaccins Heptavax B disponibles sera limitée au début, le Comité consultatif de l'épidémiologie a émis des directives afin d'indiquer les priorités parmi les sujets à vacciner.

De façon générale, ces groupes sont au nombre de trois: (A) les patients, (B) les personnes exposées à cause de leur travail et (C) les personnes exposées à cause de leur mode de vie. Le comité recommande que des vaccins soient distribués aux trois groupes, mais que la priorité soit accordée au groupe (A).

Groupe A

Ce sont les patients pour qui le risque de contamination involontaire est très élevé. Par exemple:

- les mères des nouveaux-nés du groupe sanguin positif HB_sAg;
- les patients qui reçoivent de nombreuses injections ou transfusions de sang ou de dérivés sanguins, tels les hémophiles et les thalasséniques;
- les patients ayant recours à la dialyse;
- les patients nouvellement admis dans les institutions pour handicapés mentaux.

Le Comité consultatif de l'épidémiologie recommande que toute personne appartenant à ce groupe soit vaccinée dès que le vaccin est disponible.

Groupe B

Ce sont les personnes qui sont exposées à cause de leur travail et, parmi elles, il y a les professionnels de la santé qui manipulent du sang et des dérivés du sang. Pour ces personnes,

le vaccin est urgent à divers degrés. On prévoit que les divisions de la santé provinciales détermineront, de concert avec les agences et institutions intéressées, les priorités parmi les groupes qu'elles gèrent.

Groupe C

Ce sont les personnes exposées à cause de leur mode de vie ou des contacts qu'elles ont avec d'autres. Ce groupe comprend diverses sortes de gens, tels les drogués, les homosexuels et les membres des familles dont certains membres appartiennent au groupe sanguin positif HB_sAg.

Le Comité consultatif de l'épidémiologie recommande que le contrôle du vaccin, quand les quantités en sont limitées, soit assumé totalement par les autorités médicales publiques des provinces afin d'assurer que:

- a) les sujets qui présentent des risques élevés soient vaccinés;
- b) soit évaluée l'efficacité du vaccin.

Assemblée annuelle du Conseil d'administration

Le directeur général de l'ADC, M. Hubert Drouin, a préparé un rapport sur la dernière assemblée annuelle de l'Association dentaire canadienne. Nous le reproduisons ici.

L'assemblée annuelle de l'Association dentaire canadienne a eu lieu à Ottawa, les 24 et 25 septembre derniers. C'est la première fois, croit-on, que l'assemblée n'est pas tenue à l'occasion du Congrès annuel de l'ADC qui, cette année, a eu lieu conjointement avec celui de l'Association dentaire de l'Ontario, du 9 au 12 mai, à Toronto.

Le Dr Nick Mancini, de Hamilton, a présidé le Conseil qui se composait de 27 membres. Ceux-ci ont procédé à l'élection des fonctionnaires, nommé les vérificateurs et géré les affaires de l'association.

Voici un compte rendu de leurs débats.

LES DENTISTES SALARIÉS

À la suite d'un rapport présenté par un groupe d'études spécial et portant sur les services offerts aux dentistes salariés qui sont membres de l'association, le Conseil d'administration a accepté que les dentistes salariés soient encouragés à former un groupe et qu'un comité soit établi pour mieux définir leurs intérêts et faire des recommandations.

ÉTUDE SUR LA MAIN-D'OEUVRE

L'étude portant sur les effectifs dentaires au Canada et effectuée présentement par la firme *R.K. House and Associates* pour la somme de 35 000\$, sera terminée à temps pour être présentée à l'assemblée du Conseil en mars prochain. Un rapport provisoire a été présenté à l'assemblée en cours.

En identifiant les régions où les effectifs dentaires sont beaucoup trop nombreux, l'étude aidera l'ADC et les

associations dentaires provinciales à prendre les mesures qui s'imposeront.

CDSPI

Comme les CDSPI (les Régimes des rentes et d'assurance subventionnés par l'ADC) font partie intégrante de l'Association dentaire canadienne, le Conseil d'administration a décidé, comme il le fait chaque année, que le Conseil de direction des CDSPI agirait comme le Conseil des assurances et placements de l'ADC pour l'année 1983. Les représentants de l'ADC auprès du Conseil de direction des CDSPI pour la même année seront le Dr R.L. Moran, de l'Ontario, et le Dr R. Dupont, du Québec.

Le Conseil a agréé les critères d'admissibilité touchant la participation aux régimes d'assurance des CDSPI. Les participants actuels qui ne se conforment pas à ces critères seront avisés par courrier recommandé.

Critères d'admissibilité

Est considéré "membre admissible" tout dentiste qui possède un certificat (diplôme) lui permettant d'exercer la dentisterie dans une province ou un territoire du Canada et qui est membre de l'Association dentaire canadienne ou d'une association dentaire provinciale participant aux CDSPI.

Est considéré "membre admissible désigné" toute personne qui fait partie de l'une des catégories suivantes et à qui l'Association dentaire canadienne décerne ce titre:

- les personnes qui sont employées par un membre admissible ou par une association dentaire participant aux CDSPI;
- les étudiants à temps complet et les diplômés qui, dans une école ou une faculté dentaire, sont membres en règle de l'ADC ou d'une association dentaire provinciale participant aux CDSPI;

- c) toute autre personne reconnue par l'Association dentaire canadienne comme membre admissible désignée pour les CDSPI.

La garantie pour l'assurance de la responsabilité civile professionnelle est désormais portée à 2 000 000\$ pour tout sinistre. Elle était auparavant de 1 000 000\$. Toutefois, la garantie maximale annuelle restera de 3 000 000\$. La prime annuelle pour ce supplément est de 28,75\$ et entrera en vigueur le 1^{er} janvier 1983.

Par ailleurs, les CDSPI songent à établir des taux spéciaux pour un régime d'assurance-vie à l'intention des non fumeurs.

Le Conseil a agréé une nouvelle devise pour les CDSPI, pour le Régime d'assurance des dentistes du Canada et pour le Régime d'épargne-retraite de l'ADC. Il a également agréé une nouvelle devise qui sera imprimée sur le papier à correspondance officielle et sur tous les documents écrits des CDSPI. Cette devise se lira ainsi: "régimes offerts conjointement par vos associations nationale et provinciale."

FINANCES

Le Conseil d'administration a agréé le budget pour 1983 selon lequel on prévoit un excédent des recettes sur les dépenses d'environ 111 755\$, ce qui constitue une somme respectable. Afin de s'assurer que la planification financière reste toujours bonne, de compenser pour les dépenses qui continuent à augmenter à cause de l'inflation et de maintenir les programmes qui sont utiles, le Conseil a agréé une légère augmentation des frais de cotisation (25\$) pour les membres actifs et affiliés. Cette augmentation entrera en vigueur en 1984 et s'appliquera proportionnellement aux autres catégories de membres.

La cotisation des étudiants pour

l'année universitaire 1982-1983 a été portée à 12\$.

Pour l'année financière 1982, la firme *McCay-Duff & Company* a été désignée pour agir comme vérificateur.

BUREAU ÉDITORIAL

Les fonctions du Bureau éditorial et de la rédaction du Journal de l'Association dentaire canadienne ont été plus clairement définies pour améliorer le travail d'ensemble lié à la publication. La responsabilité du Bureau éditorial est d'établir une ligne de conduite pour la gestion du Journal et son contenu publicitaire.

Le Bureau éditorial se composera de quatre dentistes, de la directrice des Communications et du rédacteur en chef. Les quatre dentistes seront nommés chaque année par le Conseil exécutif et le président de l'ADC désignera l'un d'eux pour être président du Bureau éditorial pour une période d'un an. Les dentistes pourront être membres du Bureau éditorial pour une période n'excédant pas six ans.

Les membres actuels du Bureau éditorial sont les Drs A.E. MacLeod de la Nouvelle-Écosse (président), J.D.R. Grier de la Colombie-Britannique, A.D. Sparrow de l'Alberta et M.D. Klotz de l'Ontario ainsi que Mme Ann Hammell (directrice des Communications) et M. Clarence Metcalfe (rédacteur en chef).

GROUPES DE SPÉCIALISTES — STATUT

On a soumis au Conseil d'administration la question de l'adhésion obligatoire à l'ADC en rapport avec les membres des groupes de spécialistes. Bien que le Conseil ait accepté que le règlement de l'ADC n'oblige plus ceux-ci à être membres de l'ADC, il a indiqué que, seuls, les membres actifs

de l'ADC peuvent agir comme représentants auprès de l'ADC. Le Conseil des statuts et règlements doit préparer un nouveau règlement à l'intention des groupes de spécialistes et il le soumettra au Conseil d'administration pour fins d'étude.

COMITÉ D'AGRÈMENT DES PRODUITS

L'ADC a accordé son sceau d'agrément à la firme *Beecham Canada Inc.* pour la pâte dentifrice *MacLeans*

Les autres produits agréés sont les dentifrices *Aquafresh* (*Beecham Canada Inc.*), *Colgate* (*Colgate Palmolive Canada*), *Aim* (*Lever Detergents Limited*) et *Crest* (*Proctor and Gamble Inc.*), et le rince-bouche fluoré *Listerimint* (*Warner-Lambert Canada Limited*).

COMITÉ DE RECRUTEMENT

On a exprimé quelque inquiétude au sujet des nombreux nouveaux diplômés qui, dans les deux provinces où l'adhésion est libre, ne se sont pas joints à leur association nationale. En outre, on permettra désormais aux diplômés du Québec et de l'Ontario qui se sont qualifiés pour l'ensemble des avantages leur étant consentis d'effectuer, la première année suivant l'obtention de leur diplôme, le paiement des frais de cotisation en deux versements égaux.

Afin de fournir des biens et des services d'une façon qui soit plus équitable pour les membres, le Conseil d'administration a accepté que, compte tenu de certaines exceptions liées à des facteurs économiques, le prix des biens et services serait majoré jusqu'à concurrence de 50 pour cent pour ceux qui ne sont pas membres de l'ADC. Cette mesure touchera le prix des brochures et dépliant, les services du Centre de documentation,

les bulletins distribués par courrier, etc.

CONGRÈS DE L'ADC ET DE L'ODA — 1982

À la suite d'un rapport sur le succès du Congrès tenu conjointement par l'ADC et l'ADO à Toronto, du 9 au 12 mai 1982, le Conseil a agréé à l'unanimité une recommandation voulant que "l'Association dentaire canadienne exprime ses sincères remerciements à l'Association dentaire de l'Ontario qui a organisé un congrès mixte remarquable en 1982."

Présidés par le Dr T.E. Ramage, des projets sont en cours pour le Congrès de 1983 qui se tiendra à Vancouver du 25 au 28 septembre. L'assemblée du Conseil d'administration précédera le congrès et aura lieu les 23 et 24 septembre, à Vancouver également.

AUTOMATISATION DU BUREAU

Le Conseil d'administration a agréé l'achat d'un équipement pour le traitement des textes qui sera installé au siège social de l'ADC. Son premier usage aura trait à la gestion des données sur les membres de l'ADC.

CONSEIL DES MATÉRIAUX ET DISPOSITIFS DENTAIRE

Comme on l'a annoncé à la suite de l'assemblée intérimaire du Conseil d'administration en mars dernier, le Conseil des matériaux et dispositifs dentaires continue à mettre au point, de concert avec l'Association canadienne des normes (l'ACNOR), un programme d'agrément pour les produits dentaires. L'ADC continue à fournir son aide en accordant des subventions complémentaires.

Une subvention de 8 400\$ a été octroyée à l'ACNOR pour une autre année du programme dont le but est de formuler des normes dentaires.

Suite à la page suivante

LAURÉATE DU FCRD

Le prix de la Fondation canadienne pour la recherche dentaire pour 1982 a été attribué au Dr C. Birek, de l'Université de Toronto, pour son essai intitulé: "*Dome Formation by Oral Epithelia in Vitro.*"

Quant au trophée de la meilleure institution, il a été remis au Dr Jane Aubin qui représentait le doyen de la Faculté dentaire de Toronto, le Dr Ten Cate. Le trophée sera conservé à l'université pour une autre année.

Afin d'encourager plus de personnes à s'inscrire au prix du FCRD, la date limite d'inscription a été repoussée de manière à inclure l'année qui suit la collation des grades.

CONSEIL DE L'ÉDUCATION

Le Conseil d'administration a retenu plusieurs recommandations faites par le Conseil de l'éducation touchant des changements de politique pour les programmes des internes, des résidents et des auxiliaires. Pour les deux premiers groupes, on a formé un comité spécial qui révisera les politiques en question et, pour le troisième, on a demandé au Conseil de l'éducation d'étudier davantage le sujet.

Les frais d'inscription pour le Test d'aptitudes aux études dentaires seront de 50\$ pour l'année universitaire 1982-1983.

CONSEIL DES SOINS DE SANTÉ

Les principes directeurs pour les régimes d'assurance dentaire à l'intention des enfants ont été agréés comme une déclaration de principe touchant les directives nationales. Ces principes sont les suivants:

Principes directeurs — Régimes d'assurance dentaire pour enfants

On doit accorder aux enfants du Canada des services dentaires de la plus haute qualité possible, compte tenu des ressources du pays. La mise en application des directives suivantes, lesquelles sont recommandées par l'Association dentaire canadienne, permettra d'assurer

que ces soins dentaires de haute qualité seront disponibles.

- 1 Pour tout régime d'assurance, ce qui primera avant tout et constituera une priorité majeure, ce sont l'éducation et les soins préventifs.
- 2 On considérera comme mesure obligatoire la fluoruration des eaux potables suivant des taux vérifiables. La fluoruration est une mesure qui est sûre et peu dispendieuse. En outre, il est prouvé qu'elle peut réduire de moitié l'incidence des caries et le besoin de traitement dentaire.
- 3 Le régime d'assurance doit protéger tous les enfants jusqu'à l'âge de 18 ans.
- 4 Le patient doit être libre de consulter le dentiste de son choix sans perdre les avantages financiers attachés au régime d'assurance dentaire.
- 5 Le régime d'assurance dentaire doit faire appel aux services de praticiens exerçant dans des cabinets privés.
- 6 Le dentiste diplômé doit assumer l'ultime responsabilité des soins dentaires fournis au patient ainsi que du résultat de tous les services dentaires qui sont rendus sous sa direction.
- 7 Le dentiste peut confier l'administration de soins intrabuccaux à des auxiliaires dentaires dont la compétence est reconnue officiellement seulement après avoir posé lui-même le diagnostic et le plan de traitement.
- 8 Les soins intra-buccaux administrés par des auxiliaires dentaires compétents doivent l'être seulement sous la surveillance d'un dentiste, comme l'indiquent les ordres professionnels dentaires provinciaux.
- 9 Des appels faits à des intervalles réguliers, habituellement tous les six mois, pour donner des rendez-vous au patient doivent faire partie du programme du

régime d'assurance. Lors des examens de rappel, le dentiste doit insister sur le diagnostic et la prévention pour tous les aspects d'une maladie dentaire ou d'une anomalie.

- 10 Les soins de diagnostic, de prévention et de traitement doivent être toujours disponibles pour les enfants handicapés. Ces soins doivent être administrés par un dentiste ou sous la surveillance d'un dentiste et, dans les cas indiqués, les services doivent être rendus dans un milieu qui répond aux besoins particuliers de l'enfant.
- 11 Afin de minimiser les problèmes dentaires causés par la pratique d'un sport, on recommande le port d'appareils agréés par l'ACNOR pour protéger la tête.
- 12 On doit établir des systèmes pour la comptabilité ainsi que pour la cueillette de statistiques dentaires qui feront partie intégrante du programme du régime d'assurance à des fins de contrôle et de comparaison.

CONSEIL DES SERVICES HOSPITALIERS

Le Conseil des services hospitaliers a effectué une enquête sur les soins dentaires offerts aux patients qui se trouvent dans des établissements à séjour prolongé. D'après cette enquête, ces soins font clairement défaut. On a demandé au Conseil d'administration de s'occuper de ce problème et de fournir l'encouragement nécessaire pour corriger la situation.

Par ailleurs, des directives touchant les procédures de stérilisation ont été préparées et soumises au Conseil exécutif pour examen.

On prévoit que les enquêtes menées auprès des services dentaires ou sur les programmes d'internat de dix hôpitaux seront complétées pour la fin de l'année 1983. Huit enquêtes semblables sont déjà prévues pour 1984 et il est possible qu'il s'en ajoute d'autres à ce nombre.

CONSEIL EXÉCUTIF

Le Conseil d'administration est heureux d'annoncer que le Conseil exécutif pour l'année 1982-1983 sera composé comme suit:

- le Dr W.R. Thompson — président, ADC — Ontario
- le Dr. D.E. Williams — président sortant, ADC—Nouveau-Brunswick
- le Dr. R.N. Hicks — président désigné, ADC—Colombie-Britannique
- le Dr T.E. Ramage — Colombie-Britannique
- le Dr D.L. Thompson — Alberta
- le Dr P.R. Crawford — Manitoba (les provinces des Prairies)
- le Dr B.W. Holmes — Ontario
- le Dr J. Laporte — Québec
- le Dr J. Robertson — Île-du-Prince-Édouard (les Maritimes)

Le Conseil d'administration a exprimé ses sincères remerciements au Dr G.E. Utas pour sa contribution

majeure à la dentisterie. Le Dr Utas vient de compléter son mandat comme président sortant immédiat et son mandat comme membre du Conseil exécutif et du Conseil d'administration.

Des remerciements ont également été présentés au Dr R.D. Sexton pour le mandat qu'il vient de remplir à titre de représentant des Maritimes auprès du Conseil exécutif.

FCED

Le Dr David Peters a été nommé président du Fonds canadien pour l'enseignement dentaire, succédant ainsi au Dr James A. Guest. Le représentant du FCED pour les Maritimes est le Dr Gerald Barrett et celui de l'Ontario est le Dr S. Golden.

Tous les comités et conseils de l'ADC ainsi que les organisations affiliées et les groupes de spécialistes ont soumis des rapports au Conseil d'administration.

Le Conseil des services d'informa-

tion a fait état d'une campagne du Mois national de la santé dentaire très réussie, d'un atelier sur les média tout aussi réussi tenu au Manitoba (un autre atelier est prévu pour les Maritimes) et d'un programme de publications qui, maintenant, distribue annuellement près d'un demi million de brochures et de dépliants en français et en anglais.

Aiguillonné par le président de l'ADC, le Comité des questions fiscales a exercé de fortes pressions auprès du gouvernement fédéral pour qu'il retire une proposition visant à éliminer la franchise des régimes d'assurance dentaire consentis comme un avantage aux employés. La dernière offensive a été un mémoire présenté en septembre au Comité permanent des Finances, du commerce et des questions économiques et portant sur l'imposition des régimes d'assurance dentaire. De plus, des copies du mémoire ont été adressées à tous les membres du Parlement.

Le Dr David Peters nommé président du FCED

Un ancien président des associations dentaires du Canada et de Terre-Neuve vient d'être nommé président du Conseil d'administration du Fonds canadien pour l'enseignement dentaire.

Il s'agit du Dr David Peters, de St-John (Terre-Neuve), qui s'est vu confier le poste lors de l'assemblée annuelle du Conseil d'administration de l'ADC en septembre dernier. Il succède au Dr James A. Guest.

Pour l'ADC le Dr Peters a été président en 1972-1973, administrateur de 1965 à 1974, membre du Conseil exécutif de 1970 à 1974 et représentant auprès de la Fédération dentaire internationale de 1972 à 1974.

Ce fut pendant qu'il était président de l'ADC que le FCED a été créé.

Auparavant, soit en 1958, le Dr Peters a été président de l'Association dentaire de Terre-Neuve et, de 1968 à



Le Dr David Peters

1977, secrétaire général de la même association.

Depuis qu'il est diplômé de la Faculté dentaire de l'Université Dalhousie en 1950, le Dr Peters est praticien privé à St-Jean. Membre du Collège

international des dentistes, ancien membre du Conseil de la santé de Terre-Neuve, il a représenté l'ADC auprès du Conseil canadien des normes de 1972 à 1978. Au cours des trois dernières années, il a représenté les Maritimes auprès du Conseil d'administration du FCED.

Le Dr Peters déplore que "les dons des dentistes (au FCED) n'aient pas augmenté aussi rapidement que ceux de l'industrie. J'aimerais," ajoute-t-il, "que les dons des dentistes augmentent parce que certaines causes méritent que nous les appuyions."

C'est le Dr Gerald Barrett, de Charlottetown (Île-du-Prince-Édouard), qui remplace le Dr Peters comme représentant des Maritimes auprès du FCED. Le Dr Sydney Golden, de Toronto (Ontario), est le nouveau représentant pour l'Ontario du Conseil d'administration du FCED.

La Nouvelle-Écosse ampute son régime d'assurance dentaire pour enfants

Appliquant sa politique des restrictions budgétaires, la Nouvelle-Écosse a considérablement réduit son programme de soins dentaires à l'intention des enfants.

Le 14 octobre dernier, le gouvernement provincial a annoncé qu'à compter du 1^{er} novembre, il imposerait un âge maximum pour les enfants admissibles au régime et qu'il éliminerait quatre des cinq services d'orthodontie jusqu'à présent garantis.

Le gouvernement provincial n'a pas précisé combien de temps ces services seraient suspendus et l'Association dentaire de la Nouvelle-Écosse

craint que les soins chirurgicaux seront les prochains à être retranchés.

Le directeur administratif de l'association, Monsieur D.V. Pamenter, a déclaré que le gouvernement voulait épargner 1 080 000\$ durant l'année financière se terminant en mars 1983. Sans doute, a-t-il noté, le gouvernement réussira à réduire ses dépenses "d'environ un million de dollars" grâce à ces restrictions. Cependant, lorsqu'il a annoncé qu'il amputait le régime dentaire, il ne dépassait pas ses prévisions budgétaires après six mois d'exploitation.

Toujours selon M. Pamenter, l'association a rencontré plusieurs fois le ministre de la Santé, Gerald Sheehy, dans un effort pour conserver le régime intact. On lui a même indiqué des moyens de réduire le budget davantage sans éliminer de services, mais en vain.

Avant les réductions, le régime d'assurance dentaire pour enfants fournissait, par l'intermédiaire des régimes d'assurance médicale, des soins dentaires aux enfants nés depuis le 1^{er} janvier 1967. Plus de la moitié des enfants de la province participaient au programme, a indiqué M. Pamenter, ce qui représentait 194 000

enfants dont 101 000 en ont bénéficié.

Voulant réduire les coûts qui se sont accrus de 25 à 30 pour cent au cours de la dernière année, le gouvernement a décidé que les enfants atteignant l'âge de 16 ans seraient exclus du programme. C'est donc dire que les enfants nés en 1967 ne seront plus couverts quand l'année 1982 prendra fin.

La principale raison avancée par le gouvernement pour justifier sa décision d'éliminer les soins d'orthodontie est le manque de fonds. Dorénavant, seuls seront garantis les soins pour le maintien d'espace.

De l'avis de M. Pamenter, le gouvernement "refuse au public des services essentiels. Il a raté ses objectifs et ne fait rien pour sauver le régime." Dès le début, a-t-il ajouté, nous jouions perdants parce que le gouvernement décidait tout.

Toutefois, a conclu M. Pamenter, l'Association dentaire de la Nouvelle-Écosse continue à exercer des pressions pour renverser les décisions du gouvernement et a envoyé un communiqué en ce sens à tous ses membres. "Nous avons déjà donné un bon coup," a-t-il dit, "et, certes, nous ne nous arrêterons pas là."

Reconnaissance

À tous les spécialistes qui, au cours de la dernière année, ont généreusement consenti à donner de leur temps précieux pour revoir et, à l'occasion, réviser les articles scientifiques soumis au Journal de l'Association dentaire canadienne pour y être publiés, le Bureau éditorial et la rédaction du Journal désirent offrir leurs sincères remerciements.

Comme dans tout ce qu'ils entreprennent, ces spécialistes accomplissent ce travail avec zèle et un esprit vraiment professionnel, vérifiant les manuscrits pour s'assurer que le contenu en est exact et que les recherches ont été menées adéquatement, indiquant les ambiguïtés et les erreurs d'interprétation possibles, allant même jusqu'à relever les fautes d'orthographe et de grammaire.

C'est très discrètement, et dans l'ombre, que ces personnes remplissent leur rôle, soucieux de conserver un haut degré d'excellence pour les articles que publie le Journal de l'ADC. Toutefois, ils méritent une reconnaissance publique de la part du Journal et de la profession dentaire du Canada.

Régime d'épargne-retraite de l'ADC

Les valeurs respectives du Régime d'épargne-retraite de l'Association Dentaire Canadienne étaient les suivantes au 31 octobre 1982.

Fonds d'actions ordinaires	\$56.8409
Fonds à revenu fixe	\$32.3368
Fonds garanti	\$24.7296
Fonds de placement	\$11.9888

L'avoir total (valeur marchande) du régime s'élevait à \$32,180,971.

Au 30 septembre 1982, les chiffres du mois précédent étaient les suivants:

Fonds d'actions

ordinaires	\$51.7628
Fonds à revenu fixe	\$30.8289
Fonds garanti	\$24.4771
équilibré	\$11.2069

L'avoir total (valeur marchande) du régime s'élevait à \$30,620,497.

Pour de plus amples renseignements, veuillez écrire à l'adresse suivante: Canadian Dental Service Plans Inc., Ste. 600, 2 Lansing Square, WilLOWdale, Ontario M2J 4Z3, ou appeler le service de renseignements du CDSPI en composant 1-800-268-5418 (497-7117 pour les résidents de Toronto).

En bref —

Pour la première fois dans une faculté de médecine dentaire au Québec, les membres d'un département ont choisi une femme pour le diriger et en assumer les responsabilités.

Le docteur Béique-Nadeau est directeur du Département de stomatologie de la faculté de médecine dentaire de l'Université de Montréal. Elle succède au docteur Julien Bussièrès, ancien secrétaire de la Faculté et présentement adjoint du doyen des affaires étudiantes.

Madame Claude Béique-Nadeau oeuvre à la Faculté depuis 1959. Diplômée en 1949, elle épouse le professeur Jean Nadeau, spécialiste en prosthodontie et se consacre entièrement à son rôle d'épouse et de mère en élevant cinq enfants.

Sa carrière avec la Faculté commence dix ans plus tard, quand le doyen Jean-Paul Lussier l'invite à assumer une partie de l'enseignement théorique et clinique du diagnostic.

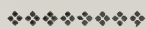
Mme Béique-Nadeau est membre de plusieurs corporations professionnelles et sociétés savantes nationales et internationales, tels l'Association dentaire canadienne, le Collège des chirurgiens dentistes du Québec, l'Ordre des dentistes du Québec, l'Association des facultés dentaires du Canada, la Canadian Academy of Oral Medicine, la Canadian Academy of Oral Pathology, l'Association internationale francophone de recherche odontologique, et l'Association internationale de pédagogie universitaire.

Comme directeur du Département de stomatologie, le docteur Béique-Nadeau devient responsable du bon fonctionnement des diverses disciplines qui le composent soit: la radiologie, le diagnostic, l'anatomie, l'histologie, la pathologie, la pharmacologie et la chirurgie buccale et maxillaire.



Le Dr Doug J. Yeo, ancien président du Conseil de l'éducation de l'ADC, vient d'être nommé président de la section canadienne du Collège international des dentistes.

L'assemblée annuelle du collège et l'installation des nouveaux membres auront lieu à Vancouver, conjointement avec le prochain congrès annuel de l'ADC.



Au service du Fonds canadien pour l'enseignement dentaire depuis 15 ans, Mme Ingrid Kleysteuber vient d'en être nommé secrétaire administrative, a annoncé le nouveau président du FCED, le Dr David Peters.

Née en Allemagne, Mme Kleysteuber a été secrétaire du directeur dentaire de la société Bayer à Cologne, puis s'est établie au Canada en 1967.

Dans son nouveau poste, elle assumera plusieurs fonctions qui étaient confiées à Murray McDonald. Celui-ci s'est retiré au FCED le 30 juin dernier, mais il continuera à agir comme conseiller.



En Ontario, le Ministère de la santé a révisé son programme afin d'encourager davantage les dentistes et les physiothérapeutes à aller travailler dans les communautés du Nord de la province.

Les dentistes qui accepteront d'aller exercer dans une région dont les services sont déficients, recevront une subvention de 28 000\$ répartie sur quatre ans ou bien on leur garantira un revenu net de 35 000\$ par année.

Auparavant, le Programme des régions défavorisées établi par le Ministère de la santé offrait une subvention de 18 000\$ ou un revenu garanti de 28 000\$.

À la fin de septembre, on comptait 53 dentistes qui travaillaient dans des régions éloignées du Nord de l'Ontario.

Également conçu à l'intention des médecins, des orthophonistes et des audiologistes, le programme veut aider les communautés qui ont de la difficulté à attirer et à retenir des

professionnels de la santé. Jusqu'à présent, plus de 700 professionnels ont été affectés à ces régions défavorisées.



Le Dr Michael Eggert de la Division de parodontie au Département de la stomatologie de l'Université de l'Alberta vient de recevoir une subvention de 263 942\$ de l'*Alberta Heritage Foundation for Medical Research Establishment*.

Le Dr Eggert s'est mérité cette subvention pour sa proposition touchant une analyse immuno et biochimique des glycoprotéines et des immunoglobulines trouvées dans les sécrétions humaines et réagissant avec les bactéries buccales.

La fondation a octroyé d'autres subventions à la Faculté de dentisterie pour des pièces d'équipement, ainsi que des bourses pour les étudiants qui effectuent des recherches à temps complet ou à temps partiel. La Faculté a également reçu plusieurs subventions du Conseil des recherches médicales.



L'école dentaire de l'Université de la Colombie-Britannique est la première au monde à s'être procuré un "simulateur d'enseignement" de la société japonaise Morita.

Le simulateur sera utilisé pour enseigner l'extraction chirurgicale des dents incluses, l'endodontie, la pédo-dontie et l'orthodontie. Présentement, seuls fonctionnent les appareils modèles pour enseigner la dentisterie restaurative ainsi que le travail ayant trait aux couronnes et aux bridges. Cependant, d'autres modèles seront mis au point très bientôt.

Centre de collaboration pour l'Organisation mondiale de la santé, l'Université de la Colombie-Britannique a pu acheter l'appareil grâce à une subvention de la Fondation Woodward. Le doyen, G.S. Beagrie, a été désigné pour faire partie d'un sous-groupe du Conseil d'experts en santé buccale de l'OMS afin d'étudier et d'évaluer cette méthode d'enseignement.

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The Anatomical Basis of Dentistry

Bernard Liebgott

*W.B. Saunders Company Canada
Limited
Toronto, Ontario
\$40.65, 511 pages*

This is an (almost) comprehensive anatomy text for dental students. At present, the only competitor is "Anatomy for Students of Dentistry" by Scott and Dixon. Several texts are devoted entirely to the anatomy of the head and neck (Du Brul's "Oral Anatomy" and Paff's "Anatomy of the Head and Neck" are excellent), but they are too limited to act as foundations for the physiology, medicine, surgery, and pathology which should be understood by dentists and for the pharmacology, anaesthesia, and medical examinations which they actually practice.

The text opens with a concise 39 pages of "General Concepts" in which most anatomical terms and divisions are succinctly defined. About 130 pages describe the thorax, abdomen, and limbs; 277 describe the head and neck; 17 are given to applied anatomy of the head and neck (radiology, facial fractures, and spread of infection); 12 pages deal with post-natal growth and development in general terms such as growth curves and developmental age.

The book ends with a six-page section unique, as far as I am aware, to general anatomy texts on "The head in old age," which is directed to the knowledge required for the construction of dentures. There is a huge, 28-page index.

The text is written to teach rather than merely to describe. There is a very large number of widely spaced, bold headings, frequently 10 or more to a page. Many of them are designed for memorising: "Three concentric coats" (the eye), "Nerve supply — a review," "Atlanto-occipital joint ("yes"), "Atlantoaxial joint ("no"), "Descriptions of bones can be very tedious and difficult to unravel. The author's solution is to take each feature and give it a separately numbered, often one-line, paragraph (e.g. 12 features of the palatine bone, 29 features of the maxilla). This is the way structures can be memorised, a tediously necessary prelude to understanding which is often forgotten or ignored by educationalists. A similar approach is made for branches of nerves and vessels. The text should make learning anatomy easier but may carry with it the disadvantage of acting as a reference source for those examiners who rely solely on multiple choice questionnaires, a disgracefully overused technique for testing university students.

Interest is sustained by prolific examples of applied anatomy such as "Clearing an airway obstruction," "Dental abscesses," "Clinical notes," "Cafe coronary of steak-house syndrome," and complications of local anaesthesia.

The figures are abundant and uniformly good. Most are simple

drawings, many with the standard anatomical coloring (how much easier dissection would have been if the nerves looked yellow!). The least successful figures, because they are too fussy, are those borrowed from other anatomy texts. A somewhat embarrassed model poses to demonstrate anatomical movements.

It is most refreshing for an anatomy text to treat the jaws and dentition in adequate detail. Very few have contributions from authors who are dentally qualified with the result that they frequently fail to emphasize medical trivia which achieve importance in dentistry, for example, palatine fovea, the modiolus and retromolar pad.

The only important, and obviously calculated, omission is a detailed anatomy of the brain. It is covered in six pages.....a pity, because 30 or so pages would, in my view, describe the system adequately. Embryology and histology each require separate texts.

There used to be an advertisement for shaving soaps comparing three faces: one covered by a skimpy layer of cream, one buried in a huge mass of froth and the last with a well-proportioned foam. The caption read "Not too little, not too much, but just right." Dr. Liebgott of the University of Toronto, who must be an outstanding teacher if this book is anything to go by, seems to have got it just right.

This book was reviewed by Dr. J.W. Osborn, Professor and Chairman of the Department of Oral Biology, Faculty of Dentistry, the University of Alberta.

Advances in Occlusion

Harry C. Lundeen
and Charles H. Gibbs

Postgraduate Dental Handbook
John Wright, PSG Inc
Littleton, Massachusetts
1982, \$37.50, 232 pages

Lundeen and Gibbs have edited a series of contributions from various authors in a 226-page book. There is considerable difficulty in determining to whom the publication is directed, although the presumption is that the reader is a practising dentist with some knowledge about occlusion.

Section I, "Applied Clinical Research in Form and Functional Relationships," is introduced with the continuing work of the authors using the Replicator system developed at Case Western Reserve University and now in use at the University of Florida. They emphasize the chewing and swallowing movements, and their forces and significance in readily understandable fashion.

The second chapter would be more appropriately entitled "A Case Report," and outlines the utilization of a muscle soreness index which is an invaluable idea and should have been covered in greater detail. Robert Lee's contribution on Anterior Guidance is excellent and deals with the relationship of posterior coronal form to the anterior determinants in clinically applicable fashion.

Chapter 5 is a compilation of Mongini's previously published material on the boney relationships between occlusion and the joint structures.

Section II, "Temporomandibular Joint Dysfunction — Diagnosis and Treatment," contains a survey of mandibular dysfunction signs and symptoms, but does not really deal with the section title. There is little on current information about

disc derangements and their diagnosis, and the Mahan chapter did not adequately cover the subject of atypical facial pain and other neurologically or psychically based pains. Clark's flow charts for treatment sequencing are an up-to-date synthesis of current concepts, and worthy of both study and application.

Section III, "Disciplinary Considerations in Occlusion," is a somewhat random selection of papers. Chapter 10 should be entitled "Experimental Studies in Occlusal Traumatism," and readers would be much more interested in the effect on humans of non-functional tooth contacts and their results on the dentition and supporting structures. The chapter on Operative Dentistry deals with a stable and intact dentition in ideal circumstances. The dentist in practice is more concerned with the problems he has in dealing with the worn and unstable dentition, so frequently seen in patients with problems of the stomatognathic system.

Vertical jaw relationships is an area where the questions outnumber the answers. This chapter is a description of work on the subject, but again is lacking in the clinical implications of that work.

Dental materials and their use in occlusal rehabilitation is an interesting chapter. The orthodontic contribution cannot be interpreted as a description of advances in occlusion. Coverage of functional orthopedic appliances, arch expansion techniques and correction of bucco-lingual inter-arch relationships is sadly lacking. The chapter on Biteguard Fabrication is a pedestrian description of a standard technique, without any attention given to the problems of mandibular repositioning or alternative appliances.

After reviewing this book, I am still not clear as to who is the target audience. The lack of cohesion and direction makes for spotty reading and the reader is forced to attempt to read between the lines. More directed editing and attention to the real advances in the subject would have produced a better book. It is recommended to the dentist with an interest in occlusion at a basic level and who has access to material of a broader range, such as the *Journal of Prosthetic Dentistry* or the *Compendium of The American Equilibrium Society*.

This book was reviewed by John Nasedkin, a prosthodontist and TMJ consultant, Vancouver, B.C.

CDA Retirement Savings Plan

Unit values of the Canadian Dental Association's Retirement Savings Plan stood as follows on October 31, 1982.

<i>Common Stock Fund</i>	\$56.8409
<i>Fixed Income Fund</i>	\$32.3368
<i>Guaranteed Fund</i>	\$24.7296
<i>Balanced Fund</i>	\$11.9888

Total assets (market value) of the plan were \$32,180,971.

The previous month's figures, as of September 30, 1982, stood as follows:

<i>Common Stock Fund</i>	\$51.7628
<i>Fixed Income Fund</i>	\$30.8289
<i>Guaranteed Fund</i>	\$24.4771
<i>Balanced Fund</i>	\$11.2069

Total assets (market value) of the plan were \$30,620,497.

For further information write to: Canadian Dental Service Plans Inc., Ste. 600, 2 Lansing Square, Willowdale, Ontario M2J 4Z3 or call the central information services of CDSPI At 1-800-268-5418 (497-7117 in Metro Toronto).

Tuberculated premolars in Amerindians

Penelope E. Grey, BA, MA
Maurice McKeown, BDS, PhD, D Orth RCS
Vlastimil Bažant, MD, DDS
Saskatoon

ABSTRACT

An anomalous tubercle found occasionally on human maxillary and mandibular premolars is described, and a review of the literature pertaining to the tuberculated premolar is presented. The presence of tuberculated mandibular premolars in the dental remains of an Amerindian female and her three offspring demonstrates the heritability of the anomaly. The study of 275 premolars from a prehistoric Amerindian population sample reveals the presence of the tubercle on 1.5 per cent. The relative lack of comparable data in the literature provides a stimulus for further study of this interesting anomaly.

Human premolars infrequently display an anomalous cone-shaped structure on their occlusal surface. This anomaly was apparently first described by Yumikura and Yoshida in 1936,¹ although its initial identification has on occasion been ascribed to Leong Min Onn, who described the anomaly at the Malayan Dental Association meeting in 1946.²

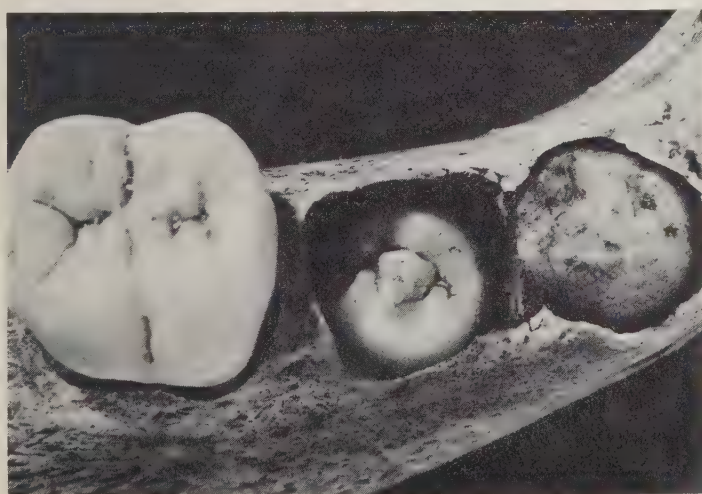


Fig. 1. Occlusal view of a tuberculated mandibular right second premolar *in situ*.

This anomaly became popularly known as "Leong's premolar", but has been subject to a wide variety of names: interstitial cusp,³ cone-shaped supernumerary cusp,⁴ occlusal enamel pearl or excrescence,⁵ dilated composite odontome of the simplest type,⁶ odontome of the axial core type,⁷ mid-occlusal tubercle,⁸ tuberculated premolar,⁹⁻¹¹ occlusal tubercle,^{1,12-14} dens evaginatus,¹⁵⁻¹⁸ evaginated odontome.¹⁹⁻²¹

DESCRIPTION OF THE ANOMALY

The tubercle is a slender projection, rather than a well-developed cusp (Figs. 1 and 2). However, the external form and size vary and terms such as nib, pointed cone, nipple and cylindrical spike, have been used to describe them.¹ Furthermore, the base of the projection has a variable appearance: smooth, grooved, terraced or ridged.⁷ The preservation of its original shape depends not only on its position on the occlusal surface but on the state of eruption of the tooth and on its contact with the teeth of the opposing arch.



Fig. 2. Lingual view of a tuberculated mandibular left second premolar *in situ*.

The internal form of the protuberance, as determined by suitable ground or decalcified sections, reveals a central pulp canal surrounded by a layer of dentine and an external enamel covering. The size and shape of the pulp canal (pulp horn) varies,¹⁵ and is an extension of the main pulp chamber (Fig. 3).

The tubercle may be found on the buccal triangular ridge or in the centre of the occlusal surface of the premolar. Occasionally it may occur on the lingual cusp¹. It may occur singly, on any one of the maxillary or mandibular premolars, or a combination of up to eight of these teeth in an individual may be involved.^{1,2} Most authors agree that males and females are equally affected.^{6,22} Curzon et al²⁰ however, claimed sexual dimorphism in their study of Keewatin Inuit, the females exhibiting the character more frequently than the males.

Clinical significance of the anomaly

The clinical significance of the anomaly rests in the sequela of fracture of the tubercle, which nearly always results in pulp exposure. The opening of the pulp chamber is nearly always followed by an infection of the pulp, which results in pulpitis, pulpal abscess and necrosis. Further penetration of the bacteria or products of gangrene into the periodontium may result in acute or later chronic periodontitis, as evident in the mandible of the adult female described below.

The treatment of this anomaly may vary. If detected early enough, before the cusp fractures, the easiest and simplest solution is a gradual removal of the cusp by grinding. If this is done slowly enough, the dentinal injury caused by grinding will induce deposition of secondary dentine in the pulp horn area. Another possible solution is a complete removal (amputation) of the cusp and, in case of necessity, a direct pulp capping with a calcium hydroxide compound and placement of a filling. Finally, the removal of the injured pulp and endodontic treatment of the tooth is a possibility. Any of these treatments will prevent the loss of the anomalous tooth.



Fig. 3. Axial section of a tuberculated mandibular left second premolar showing the extent of the pulp horn.

Evidence for inheritance of the anomaly

Although the etiology and mode of inheritance of the tubercle are not yet understood, the heritable nature of the anomaly can be demonstrated in the remains of four individuals from northern Saskatchewan. The skeletal remains are historic Amerindian and have been identified by a living relative as belonging to an adult female and her three children whose sex is unknown to the authors.

The adult female exhibits a tubercle only on the mandibular left second premolar (tooth 3-5). The pulp chamber was exposed and a large periapical abscess was evident on the buccal aspect of the mandible. The corresponding mandibular right second premolar (tooth 4-5) was lost antemortem, and it is possible that the cause of its loss may have been the same, because (1) the tubercle has usually been found to occur bilaterally^{6,7} and (2) the bony healing on the buccal aspect of the mandible suggests a similar lesion. The maxillary premolars do not exhibit the trait, although the antemortem loss of the left second premolar (tooth 2-5) cannot be positively accounted for.

The child judged to be the eldest, by examination of the pelvis and of tooth eruption (the second molars had erupted), exhibits the tubercle only on the mandibular right second premolar (tooth 4-5). The tubercle is small and unaffected by pathological processes.

The second eldest child (the second molars had also erupted but the third molar crowns were less well-developed than those of the first child) does not exhibit the tubercle. However, the maxillary and mandibular left first premolars (teeth 2-4 and 3-4) were lost postmortem and were not recovered from the burial site.

The youngest child (the second molars were unerupted) exhibits the tubercle on three mandibular premolars, the right first premolar (tooth 4-4) being unaffected. In the maxilla, of the four premolars only the right first premolar (tooth 1-4) was recovered from the burial site, and it does not exhibit the tubercle.

Although the morphology of the premolars of the male parent is unknown, and the cases reviewed above do not constitute a sample large enough to determine the mode of inheritance, this unique example does demonstrate the heritable nature of the trait.

REPORTED INCIDENCE OF THE ANOMALY

Numerous writers have found the tuberculated premolar to occur in individuals of various origins. Yumikura and Yoshida³ first observed this anomaly in Japanese premolars, and Kato⁴ reported an incidence of 1.09 per cent in 1467 Japanese individuals. Oehlers² found that 74 of 184 premolars in 30 Chinese patients possessed this anomaly. Pedersen⁵ found only seven tuberculated premolars in the East Greenland Inuit whom he studied. Miles²³ presented a case of tuberculated premolars in a Chinese girl. Lau⁷ discovered one or more affected premolars in 27 of the 2101 Chinese individuals whom he examined, and Wu⁸ found a frequency in Chinese of 1.52

per cent in 1054 individuals. Moorrees²⁴ found only one example in Aleut dentitions. Villa et al.¹² reported three cases of the tubercle in Filipinos. Merrill¹ found that 28 of 650 Alaskan Indian, Inuit and Aleut students possessed this anomaly. Poyton and Vizcarra¹⁹ reported a case of affected premolars in 43 Chinese patients. Alexandersen²⁵ reported the frequency of the anomaly in three major Inuit groups, which revealed from 0.0 to 5.6 per cent presence of the trait, as well as two Amerindian groups, 0.9 per cent in the Navaho and 10.7 per cent in the Pima. Curzon et al.²⁰ reported an incidence of 3 per cent in the Keewatin Inuit. Palmer²¹ discovered five British children exhibiting the tubercle. Senia and Regezi¹⁶ reported a case of tuberculated premolars in a Filipino, and Sykaras¹³ in a Greek girl. Reichart and Tantiniran¹⁷ found tubercles in 51 of 1696 Thais. Mayhall²² found that in Central Arctic Inuit 38 of 1704 premolars were affected, and reported a frequency of 38.1 per cent in Alaskan Indians. Smith¹⁴ found frequencies of .53 (male) and .49 (female) for the second premolar of several Habbaniite lineages of Israel. Escobar et al.¹⁸ reported the frequencies for several Guatemalan groups: 0.74 per cent in the Quechchi Indians which he studied, and from 1.01 per cent to 6.27 per cent in six other Guatemalan groups, reported by Gutierrez in 1969 and Cassellas in 1971. Finally, Mayhall et al.²⁶ reported no incidence of this anomaly in 422 Ontario Caucasians.

Incidence in an Amerindian population sample

The dental morphology of the human skeletal remains from the Glen Williams Site, a prehistoric Iroquois ossuary from Ontario, has been described by Grey.²⁷ For the 275 premolars that were observed in the Grey study (128 maxillary and 147 mandibular premolars), only four premolars, or 1.5 per cent exhibited the tubercle: one maxillary right first premolar, two maxillary left first premolars, and one mandibular right first premolar. This frequency appears somewhat higher than that reported for Navaho Indians (0.9 per cent)²⁵ and lower than that for Pima Indians (10.7 per cent).²⁵

DISCUSSION

Early writers on the subject of tuberculated premolars believed them to be peculiar to individuals of so-called Mongoloid origin.^{1,2,28} Recent evidence however, has revealed its occurrence in Caucasians as well.²¹ No study of the incidence in North American Indian dentitions has been made since the work of Alexandersen.²⁵ The present study of a prehistoric Amerindian population revealed the tubercle on 1.5 per cent of the premolars examined.

The frequencies reported by the various authors cannot be directly compared to each other or to those of the present study, for sampling techniques are extremely varied. For example, a large proportion of the information is drawn from clinical records and these do not constitute a valid population sample. In addition some of the frequencies have been based on total tooth count while

others are based on the number of individuals. Although the anomaly appears to predominate in persons of 'Mongoloid' origin, this may in part reflect the lack of information regarding other population groups. All of the samples are however, affected by the increased possibility of the infection and loss of the premolars possessing the anomaly. Thus, the reported frequencies probably represent underestimates of its incidence in the respective groups. Ideally, the anomalous tubercle should be identified in just-erupting premolars.

Considerably more information on Amerindian dentitions is required before definitive statements can be made regarding the incidence of the tubercle in these populations. The frequency found for the Glen Williams dentition appears similar to those reported for some Japanese and Chinese groups,^{4,7,8} while somewhat lower than those for some Eskimo and Indian groups.^{1,20,22} It is considerably lower than that reported for Pima Indians.²⁵ It is certain however, that because the Glen Williams frequency is based on ossuary material, the data are only roughly comparable.

Further anthropological and dental research is warranted in view of the lack of information regarding the developmental origins and the incidence in various populations of the tuberculated premolar. Further investigation should be directed to valid familial and population studies, so that the genetic and developmental significance of this interesting anomaly may be more fully realized.

SUMMARY

A little-known dental morphological feature, the tuberculated premolar, is described and previously published data regarding the incidence of the trait are presented. A morphological study of the dentitions of a prehistoric Amerindian population revealed a frequency for this trait of 1.5 per cent of a sample of 275 premolars. A call for valid population studies is made in order that the significance of this anomaly be better understood.

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Penelope Grey is a graduate student in the Department of Anthropology, University of Saskatchewan, Saskatoon; **Dr. McKeown** was an associate professor in the Department of Oral Biology, University of Saskatchewan, at the time of preparation of this article; and **Dr. Bazant** is an associate professor in the Department of Oral Biology, University of Saskatchewan.

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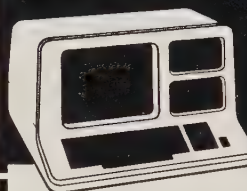
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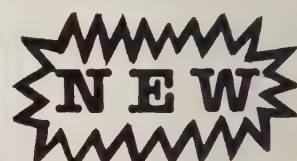
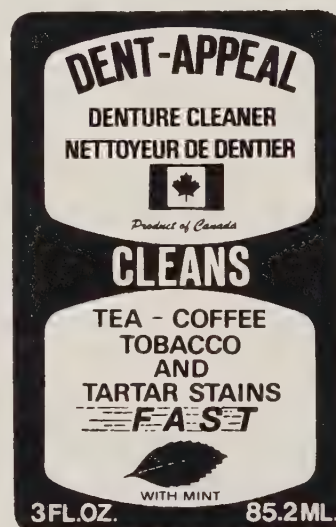


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Bite mark evidence

R.B.J. Dorion, BSc, DDS, DABFO*

ABSTRACT

The object of bite mark investigation is to ascertain whether one is dealing with a bite mark and secondly whether the bite mark is of human or of animal origin.

The article will attempt to deal with both types of bite mark evidence and will point out some of the more important factors when dealing with such evidence.

Bite Mark Evidence

The criteria for discerning between bite marks of human or of animal origin are:

Subjective

- clinical exam
- victim and witness testimony
- circumstances (history)

Objective

- scene of the crime (findings)
- clinical exam:
 - a) presence or absence of saliva and blood grouping
 - b) presence or absence of suction marks
 - c) presence or absence of oral flora⁷, calculus or tooth fragment in wound
 - d) width and form of the arches (from tooth alignment)
 - e) width and form of the individual marks (teeth)
 - f) the opening diameter (distance between the upper and lower centrals)
 - g) the distance between the canines
 - h) depth of penetration of individual teeth
 - i) selectivity of tissue bitten



Two teeth marks on this pencil found at the scene of a crime was consistent with a suspect's upper denture tooth. When confronted with the evidence, the suspect pleaded guilty.

The investigator should keep in mind that the presence of human saliva may be present in a bite mark of animal origin if the victim or a third party has sucked the wound.

Bite marks on inanimate objects:

Once one has discriminated between a human and an animal bite⁹ there are a variety of other factors that one should consider when analysing the inanimate object¹⁰⁻¹¹. These may be broadly divided into four major categories:

- a) that which has to do with the subject doing the biting;
- b) that which has to do with the object bitten;
- c) that which has to do with the recording of the bite mark;
- d) other factors.

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Table 1**Factors involved with bite mark evidence in foodstuff**

That which has to do with the subject doing the biting.	That which has to do with the object bitten.	That which has to do with the recording of the bite mark.	Other factors.
— position and action. — force of bite. — dentition: — natural — natural and synthetic — synthetic — occlusion — single and multiple bites — alignment of teeth. — horizontal and vertical relationships	— the age of the object (when picked). — the size. — the weight. — the volume. — the number of bites. — extrinsic factors: — temperature of room — humidity — ventilation — bacteria — foreign material — storage — transportation — the type of material: — solid — semi-solid — porosity — combination of materials. — surface area exposed to elements.	— methods and materials employed for taking impressions. — accuracy of reproduction of models and object. — accuracy of reproduction of photographs.	— how evidence is collected, transported and stored. — interpretation: subjective and objective. — elapse of time.

Table 2**Protocol: Bite mark in Foodstuff**

Subjective analysis	Objective analysis	Tests	Photography	Impressions	Suspect
— Clinical examination. — Circumstances. — Witnesses. — Scene. — Manner in which suspect handles similar test material. — Arm, hand and jaw movements. — Which arch incises, which holds. — Manipulation of object. — Immediate storage under control conditions. — Impressions. — Timing by tests. — Saliva smear around margins but outside (i.e. position of lips) and inside object (i.e. position of lower arch). — Controls.	— Fingertips. — Saliva smear (blood grouping). — Orientation. — Clinical examination. — Opening diameter. — Arch alignment. — Individual tooth diameter. — Central line. — Holding and biting arches. — Written report.	— similar material under similar conditions.	— Photos at scene. — Serial photography of object (2 planes). — B & W. — Colour. — 1 : 1 — I.D. of photos. — Electronic flash best. — Ruler. — Case no. — Photography of casts (2 planes).	— Material utilized should not be hydrophobic nor hydrophilic. — A positive and/or a negative depending upon test object. — Duplicate (one untouched).	— Court order or informed written consent. — Blood typing. — Fingerprinting — Photographs. — Dental casts. — Objective examination. — Bite registration. — Duplicate casts. — X-rays. — Past dental records. — Mounting and articulation. — Test object under similar conditions.

Table 1 points out some of the more common factors involved with bite mark evidence in foodstuff.

Table 2 suggests a protocol for this type of bite mark evidence.

Bite marks on human tissue:

Bite marks may be found on live or deceased individuals. In the latter case, they may have been inflicted during life, at the time of death or post mortem. They may be of animal or of human origin.

There are certain advantages faced with bite marks on live individuals. The case history, the description and identification of the assailant may be made by the victim. These points may be confirmed and corroborated (or negated) by the objective findings in bite mark analysis. There are certain disadvantages faced by the investigator. The victim may have undergone severe physical and emotional trauma and therefore the investigator may not have immediate access to the victim. Bleeding, suturing and bandaging of the bite site may be additional problems. The possibility of secondary infection as well as rabies, syphilis, and hepatitis may be contracted by the victim. The inflammatory process is a distinct advantage for the timing of the injury.

Tables 3 — 4 and 5 represent some of the more important factors involved with the clarity of bite mark evidence on human tissues.

Bite mark recognition is a most fundamental precept yet it may be illusive to the most experienced investigator. One may see a child in his dental practice and not suspect that behind a bite mark is a battered child. Days or weeks later this child could end up on an autopsy table if proper action was not taken. When dealing with a cadaver it may be the only clue linking the victim to a suspect.

The most common types of human activity associated with bite mark evidence are rapes, homosexual acts, battered children, certain forms of sexual behavior and self defence.

Bite mark evidence is usually considered, judicially speaking, as common or aggravated assault. When this finding is coupled with other evidence, such as a rape or homicide, then this evidence has even greater importance. The link between bite mark evidence and the more serious crime will be alluded to by the police and prosecutors at a future trial. In exceptional cases, bite marks have been the cause of death (to be differentiated from manner). Animals (for example: Dogs, donkeys, horses and bears) have been known to bite their victims which have subsequently hemorrhaged and exsanguinated.

In one case this author was involved with, the victim's tongue was completely severed by an assailant while the victim was still alive. In this case the bite mark was a direct contributory cause in the death of the victim. This resulted in hemorrhage, asphyxia by blood aspiration in the respiratory tract and death.

Table 3

Factors which affect clarity of bite marks on human tissue

That which has to do with the subject doing the biting: Assailant	That which has to do with the subject being bitten: Victim	That which has to do with the recording of the bite mark	Other factors
— selectivity of tissue	— victim alive or dead	— Accuracy of reproduction of photographs	— How evidence is collected and accuracy
— emotion or mental state	— bite marks before or after death		— Interpretation subjective and objective
— position and action	— Race: Caucasoid Negroid Mongaloid	— Collection and preservation of tissue	— Elapse of time
— sucking	— Sex: Male Female	— Methods of impression taking	— Distortion, etc.
— force of bite	— Age: Child Adolescent Adult		— Other extrinsic factors (Table 5)
— dentition: — natural — natural and synthetic	— Single or multiple bites (overlap)		
— synthetic	— occlusion		
— occlusion	— single and multiple bites (overlap)		
— single and multiple bites (overlap)	— Type of tissue		
— Fracturing of teeth during biting	— Underlying tissue		
— Calculus and oral flora	— Position and action		
	— Mental state: passive or struggling		
	— State of body or corpse		
	— Depth		
	— Intrinsic Factors		

The "stereotype bite mark" is described as one that has both upper and lower teeth imprinted on the object. The proximity of the two arches may form an oval or circular pattern. This usually includes the six upper and six lower anterior teeth. So much for stereotyping a bite mark. Because of the many factors involved in the clarity of bite mark evidence on human tissues, not to mention detection, a bite mark may assume just about any pattern depending upon circumstances. This author has investi-

Table 4**Intrinsic factors that can affect bite mark evidence**

- General health, medical history
- Fatness and weight
- Capillary fragility
- Skin diseases
- Blood disorders
- Melanin pigmentation
- Fluid and salt imbalances
- Other systemic diseases
- Tissue tonus
- Tension lines

Table 5**Extrinsic factors that can affect bite mark evidence**

- Other physical deformation near bite mark (Tire marks, stab wounds, overlap, etc.)
- Rodents or other animals eating tissues
- Chemicals (Lime, embalming fluid, etc.)
- Moving the corpse and post mortem trauma
- Clothing
- Exposure to the elements:
 - Temperature changes
 - Humidity
 - Soil conditions (dirt, gravel, sand, etc.)
 - Soil bacteria
 - Foreign objects
 - Water
- Other contaminants

gated a single circular puncture mark on a human leg which proved to be a dog's upper right canine. In several cases only one arch was visible while in another case both upper and lower premolars and molars were imprinted. Meticulous examination in another case revealed an upper arch imprint against the victim's skin without subcutaneous hemorrhage.

Bite mark analysis involves both a quantitative and qualitative substantive. The quantitative measure is self explanatory. The qualitative measure involves the search for peculiarities of the bite mark. The combination of these as well as other factors such as tooth alignment⁸, vertical and horizontal relationships, occlusion, etcetera introduces the concept of specificity and uniqueness of the bite mark which may then be compared to the suspect's dentition for the same characteristics.

The investigator must always keep in mind that a self inflicted bite mark is always possible. This may be accidental or intentional. Accidental self inflicted bite marks

can occur as a result of a sporting accident or during an epileptic seizure, as examples. If it is intentional it may be in order to counteract pain from another area of the body or to incriminate an innocent party or the assailant may have forced a body part into the victim's mouth. Therefore an analysis of the alleged victim's dentition is an essential component of bite mark investigation. This author has seen self inflicted bite marks on the tongue, female breasts, arms and hands as well as the penis. Moreover an analysis of the alleged victim's dentition may confirm important facts such as bite marks inflicted by the victim on the assailant. There are very few areas of inaccessibility for self inflicted bite marks. These are the head and neck area, the back and the buttocks. The most versatile acrobat would not, in all likelihood, be able to reach the latter two areas.

One must be able to follow a protocol²⁻⁵ in bite mark investigation whether the victim is alive or dead. This also holds true for the alleged suspect, whether he is alive or dead. This rule is particularly true if the suspect is not immediately apprehended for one must look for changes in the dental status of the suspect since the alleged incident took place. Prior dental records as well as models and photographs of the suspect's dentition may eventually be sought for comparative purposes¹⁻³. There may be civil⁴ and / or criminal charges³ brought against an alleged victim and / or the suspect. One should, therefore, never underestimate the importance of complete and accurate dental records.

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The Ottawa Dental Society presents "Orthodontics" by Dr. Gavin James of Orillia, Talisman Motor Hotel, Ottawa, January 17, 1983, from 9am to 5pm.

February/février

Joint Meeting of the ODS, ODN&AA, and Hygienists will be held in Ottawa, February 21, 1983. Table clinics, commercial exhibits and films will be held. The theme is "Debugging your Dental Office."

March/mars

The Canadian Dental Curling Championship, in conjunction with the Western Canada Mid-Winter Dental Convention, will be held in Calgary, Alberta, March 9-12, 1983. Convention speaker Dr. Hank Shimbashi, whose topic is "Introduction to Neuromuscular Occlusion and Myoelectronics", will speak on March 9, 2-5 pm, at the Palliser Hotel. Registration for the Bonspiel and/or Wednesday lecture can be made by contacting Dr. R. Taillon, 202-1711-4 Street S.W., Calgary, Alberta T2S 1V8; 264-7162.

A Periodontal Symposium, presented by the Ottawa Dental Society, will be held at the Talisman Motor Hotel, Ottawa, March 28, 1983, from 9am to 5pm. Speakers are Drs. Myron Poplove, Richard Yamaoka, James MacDonald, Jean-Marc Vincent, André Marcil, Dan Morrow, John Morrow, John Whyte and Bruce Squires.

April/avril

The Ottawa Dental Society presents "Predictable Restorative Procedures" by Dr. Alvin Fillastre of the L.D. Pankey Institute, Florida, Talisman Motor Hotel, Ottawa, April 18, 1983, from 9am to 5pm. The meeting will be followed by dinner, a general business meeting and elections for ODS members.

The Faculty of Dentistry, Dalhousie University will offer a review course for oral and maxillofacial surgeons from April 18-22, 1983. This is the first time such a comprehensive review course has been offered in Canada. Topics will include Medicine, Physical Diagnosis, TMJ Surgery, Trauma, Anaesthesia, Dento-facial Deformities, Infection and Cleft Palate. Participation exercises in histopathology designed specifically to meet the needs of oral and maxillofacial surgeons will be offered in four evening sessions. It is being co-ordinated by Dr. David S. Precious, Director of the graduate program in Oral Surgery. Brochures, including application forms, can be obtained by writing: Continuing Education in Dentistry, Faculty of Dentistry, Dalhousie University, Halifax, Nova Scotia B3H 3J5, Canada; (902) 424-2248.

May/mai

The North Central region, in conjunction with the Northeastern region of the American Academy of Dental Group Practice, will hold its 1983 annual meeting in Canada, Westin Hotel, Toronto, Ont., May 13-15, 1983. Contact: American Academy of Dental Group Practice, Ms. Joann Junkins, Executive Secretary, 1709 Elka Lane, Madison, Wisconsin 53704, Phone: (608) 241-2609.

Ontario Dental Association 116th Annual Spring Meeting, The Sheraton Centre, Toronto, Ontario, May 15-18, 1983. Contact: Mrs. W.C. Durham, 234 St. George Street, Toronto, Ontario M5R 2P1.

"Medic Canada '83... Towards the Year 2000", a major international health care, medical devices conference and exhibition, Edmonton, Alberta, May 29-31, 1983. Contact: Robert S. First, Inc., 707 Westchester Avenue, White Plains, N.Y. 10604; (914) 949-4248.

The 1983 Annual Convention of Les Journées Dentaires du Québec, Montréal, Québec, May 28-June 1, 1983. Contact: Dr. Morton Lang, Executive Director, Les Journées Dentaires du Québec, 3565 rue Berri, Suite 200, Montréal, Québec H2L 4G3. Phone: (514) 842-9112.

June/juin

The Canadian Association of Oral and Maxillofacial Surgeons Meeting, Vancouver, British Columbia, June 3-6, 1983. Contact: Dr. Brian M. Abrams, Secretary, Canadian Association of Oral & Maxillofacial Surgeons, 410 - 11012 MacLeod St.S., Calgary, Alta. T2J 6A5.

July/juillet

The 5th Canadian Congress of Dentistry for Children, Westin Hotel, Calgary, Alberta, July 1-3, 1983. Contact: Dr. Jack A. Derbyshire, 496-115-9th Avenue S.E., Calgary, Alberta T2G 0P5. Phone: (403) 262-7000.

September/septembre

Meeting of the Canadian Academy of Prosthodontics, Vancouver, B.C., September 22-24, 1983. Contact: Dr. B.M. Jackson, 22 Water Street S., Kitchener, Ontario N2G 4K4.

The Royal College of Dentists of Canada Symposium on Periodontal Diseases, generously supported by Colgate-Palmolive Canada, as part of the Canadian Dental Association's National Convention, Vancouver, B.C., Monday, September 26, 1983. The keynote speaker for the Symposium will be Dr. Harald Löe, newly appointed Director of the National Institute of Dental Research, Bethesda, Maryland, and presently Dean of the School of Dental Medicine at The University of Connecticut.

International

January/janvier

Eighth Annual Yankee Dental Congress, Sheraton-Boston Hotel, Boston, January 13-16, 1983. Presented by the Massachusetts Dental Society, the Congress is the sixth largest dental meeting in the U.S. Contact: Massachusetts Dental Society, 36 Washington Street, Wellesley Hills, MA 02181.

The 13th Annual Miami Winter Meeting, sponsored by the East Coast District Dental Society (FL), Fontainebleau Hilton, Miami Beach, Florida, January 20-22, 1983. Contact: East Coast District Dental Society, 420 South Dixie Highway, 2-E, Coral Gables, Florida 33146. Phone: (305) 667-3647.

Congrès International d'Implantologie Orale, Bordeaux, France, 22 janvier 1983. Pour tout renseignement, s'adresser: Docteur D.M. Courtois, 152, Avenue Charles de Gaulle, 33200 Bordeaux Mérignac.

The "Kieferorthopädische Fortbildungstagung in Kitzbuhel" meeting, Kitzbuhel/Tyrol, Austria, January 30- February 5, 1983. Contact: Medizinische Ausstel-

lungs- und Werbegesellschaft, Maria Rodler & Co., A-1014 Wien I, Freyung 6, Postfach 155.

February/février

Annual Willard Fleming Memorial Lecture, organized by The American College of Dentists in co-operation with University of the Pacific, The Westin Miyako Hotel, San Francisco, California, February 12, 1983. Contact: Department of Continuing Education, University of the Pacific, 2155 Webster Street, San Francisco, California 94115.

The 118th Midwinter Meeting of the Chicago Dental Society, Conrad Hilton Hotel, Chicago, Illinois, February 20-23, 1983. Contact: Chicago Dental Society, 30 North Michigan Avenue, Chicago, Illinois 60602, or phone: (312) 726-4076.

15th European Congress for Dentists, Davos, Switzerland, February 20 to March 5, 1983. Contact: H.-P. Schultze, Departmental Chief, Stiftung Zahnärztlicher Fortbildungskongress Davos (ZFD), Rheinallee 55, 5300 Bonn 2, Switzerland.

9th Congress of Dentistry for Children, Wenworth Melbourne Hotel, Australia, February 21-24, 1983. Contact: Dr. Roger K. Hall, Royal Children's Hospital, Parkville, 3052, Victoria, Australia.

Virgin Islands Dental Association Convention, February 27 to March 5, 1983. This year's theme is "Nutrition, Awareness, and Future Focus", and speakers include Drs. Cheraskin, Ken Olsen, Robert Goepp and Harold Slavkin. Limited to 300 registrants. For information contact: Dr. R. Brandon, 85 Lonsdale Drive, London, Ontario N6G 1T4.

March/mars

The International Congress of Oral Implantologists Annual Meeting and Scientific Sessions, Beverly Hilton Hotel, Beverly Hills, CA, March 11-13, 1983. Contact: Mr. Clifford J. Kirschner, Executive Director, The International Congress of Oral Implantologists, P.O. Box 2277, Grand Central Station, New York, N.Y. 10163, (201) 783-6300.

International Meeting for Dental Continuing Education, Kulm-Hotel, St. Moritz, Switzerland, March 14-27, 1983. For details and program, contact: Downtown Travel Centre, 807 Hornby Street, Vancouver, B.C. V6Z 1T9. Phone: (604) 684-6471.

International Conference of Dental Surgeons, Rawalpindi/Islamabad, Pakistan, March 22-26, 1983. Contact: Chairman, Organizing Committee, Armed Forces Institute of Dentistry, Rawalpindi, Pakistan.

"Pain Control — Something New and Exciting," presented by The Maxillofacial Pain Control Center, Temple University, Philadelphia, PA, Saturday, March 28, 1983. The clinicians include Samuel Seltzer, Robert Pollock, Dorothy Dewart and Louis Dubin. For further information contact: Continuing Education Department, School of Dentistry, Temple University, 3223 N. Broad Street, Philadelphia, PA 19140; (215) 221-2995.

III Pan-American Congress of Periodontology, sponsored by the Asociación Mexicana de Parodontia, México, Mexico, March 31 to April 3, 1983. Contact: Asociación Mexicana de Parodontia, Ezequiel Montes 92, Col. Revolución, 06030 México, D.F., Mexico.

April/avril

International Congress of Dental Technology, organized by the Swiss Association of Dental Prosthetics Laboratories, Palais de Beaulieu, Lausanne, Switzerland, April 14-16, 1983. The theme is "Aesthetics in Dentistry." Contact: Secrétariat du Congrès, Office du Tourisme et des Congrès, 60, avenue d'Ouchy, CH-1006 Lausanne, Switzerland.

International Symposium on Biomechanical Aspects of Prosthodontics, presented by Professor George Zarb, Chairman of Graduate and Undergraduate Prosthodontics, Faculty of Dentistry, University of Toronto, and sponsored by The Hebrew University-Hadassah Faculty of Dental Medicine and the Toronto Alumni Chapter of the Alpha Omega Fraternity, Jerusalem, April 20-21, 1983. Contact: Professor J. Pietrokovski, Director of Removable Prosthodontics, Department of Oral Rehabilitation, The Hebrew University-Hadassah Faculty of Dental Medicine, P.O.B. 12000, Jerusalem, Israel; or Dr. Hart Levin, Co-Chairman, 2006 Bathurst Street, Toronto, Canada M5P 3L1, (416) 781-2751.

Alabama Implant Congress VX, Birmingham, Alabama, April 21-24, 1983. Contact: Alabama Implant Study Group, P.O. Box 4682, Birmingham, Alabama 35206.

9th Annual Meeting of The Society for Biomaterials and 15th International Biomaterials Symposium, Birmingham Hilton, Birmingham, Alabama, April 27 to May 1, 1983. Contact: Society for Biomaterials, c/o Dr. Robert G. Craig, Department of Dental Materials, School of Dentistry, University of Michigan, Ann Arbor, Michigan 48109.

First International Symposium on Periodontics and Restorative Dentistry, Sheraton-Boston Hotel, Boston, Massachusetts, April 28-30, 1983. Contact: Kim

Vander Steen, Quintessence Publishing Co., Inc., 8 S. Michigan Avenue, Suite 2301, Chicago, Illinois 60603. Phone: (312) 782-3221.

July/juillet

The next meeting of the American Dental Society of Europe will be held at the St. Pierre Park Hotel, Guernsey from June 28 to July 1, 1983. All enquiries should be made to: Brian J. Parkins, Hon. Secretary, 57 Portland Place, London W1N 3AH England.

6th Dentistry International Congress, Rio de Janeiro, Brazil, July 16-21, 1983. For further information contact: A.B.O. — Rio de Janeiro, Ave. 13 de Maio — S/1001/6, CEP. 20.031, Rio de Janeiro, RJ, Brazil.

November/novembre

Fédération Dentaire Internationale, 71st Annual World Dental Congress, Tokyo, Japan, November 14-20, 1983. Contact: Japan Dental Association, 1-20, Kudan-Kita 4-chome, Chiyoda-ku, Tokyo 102, Japan.

1984 +

The 1984 Annual Convention of Les Journées Dentaires du Québec, Montréal, Québec, April 8-12, 1984. The convention will be held jointly with the Canadian Dental Association convention.

1st International Congress of Medical Law and Ethics in Dentistry, Tel-Aviv, Israel, April 8-13, 1984. Contact: Israel Government Tourist Office, 102 Bloor Street West, Toronto, Ontario M5S 1M8; (416) 964-3784.

4th World Congress of Pain, sponsored by the International Association for the Study of Pain, Seattle, Washington, USA, August 31 to September 5, 1984. For information contact: Louisa Jones, Executive Secretary, IASP, 1309 Summit Avenue, Room 101, Seattle, Washington 98101 USA. Phone: (206) 292-7521.

CDA

Canadian Dental Association, 1983 National Convention, Vancouver, British Columbia, September 25-28, 1983.

Canadian Dental Association, 1984 National Convention, Montreal, Quebec, April 8-12, 1984. Contact: Dr. Morton Lang, O.D.Q., 3565 Berri St., Suite 200, Montreal, Que. H2L 4G3. Phone: (514) 842-9112.

Canadian Dental Association, 1985 National Convention, Ottawa, Ontario, September 29-October 2, 1985.

Marketplace

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BRITISH COLUMBIA — **For sale:** Well established, busy, preventive practice. Two, modern-equipped, restorative plus hygiene operatories. Situated in professional building. Located in Southern B.C. fruit growing area offering hunting, fishing, skiing, etc. Reasonably priced \$93,500. Reply to CDA Box Number 2080.

BRITISH COLUMBIA — **Gold River.** High gross, high potential practice for sale. Modern four operator office (three operatories equipped). This practice serves a population of over 4,000. Originally established as a satellite practice. Contact: Dr. S. Miller, 500 Nimpkish Drive, P.O. Box 910, Gold River, B.C. V0P 1G0 or phone: (604) 283-7422.

MANITOBA — **Active O.M.S.** In Winnipeg, Canada for sale. Surgeon retiring. Well established, well equipped, 1200 square feet. Flexible financing. Will stay to introduce. Reply to CDA Box Number 2128.

ALBERTA — **Pincher Creek.** Practice for sale. Owner wishes to return to school. Opportunity for one or two dentists. Any combination of practice, building, equipment etc. offered. Very reasonable terms. Phone: (403) 627-3290.

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QUÉBEC — **Dolbeau.** Un denturologue offre ses espaces libres pour dentiste voulant opérer dans le secteur Lac-St. Jean à Dolbeau. Équipement quasi complet, salle d'attente, 2 salles de travail, chambre de radiographie, laboratoire. Le tout pouvant être aménager au goût du dentiste. Pour de plus ample information tél: (418) 276-5504.

Associateship Available

YUKON TERRITORY — Associate or partner wanted for six-chair dental clinic in newly constructed Medical-Dental building. Interested parties please contact Dr. R. Pearson, Klondyke Dental Clinic, 3089-3rd Avenue, Whitehorse, Yukon Territory. Phone (403) 668-3152.

BRITISH COLUMBIA — We are looking for an associate to join our busy family practice in picturesque Revelstoke, British Columbia. Our established group offers a unique opportunity to practise high quality dentistry in a low stress environment. For information please call collect (604) 837-5149.

BRITISH COLUMBIA — We are looking for an associate to join three young dentists in January, 1983. Our busy family practice, in a new medical/dental building, is located in Central B.C. For further information call Dr. Wendy Bellamy (604) 249-5976 (home) or (604) 992-3771 (office). Please send written inquiries to 665 Front Street, Quesnel, B.C. V2J 2K9.

BRITISH COLUMBIA — **Associateship available June, 1983 (or after) in B.C.** Present associate returning back east after two years. The practice is a large one treating mainly families so there is opportunity to practise every branch of dentistry. The equipment is virtually brand new with x-ray heads in each of the 9 rooms; a pan x-ray is also on the premises. The associate will have two operatories. A fair percentage is paid. The present associate has consistently taken in an excellent gross income per month and exact figures would be available to interested parties. Williams Lake is a small

town in the interior of British Columbia and offers all sorts of outdoor activities, excellent hunting, fishing, skiing, etc. There is a daily jet service to and from Vancouver. Call collect (604) 398-7161 (office) or (604) 392-2615 (home).

ALBERTA — **Associateship.** Busy general practice, two hours north of Edmonton, Alberta. Well established with option to buy in. For information contact: Dr. Eldon Hickerty, Box 1459, Slave Lake, Alberta T0G 2A0, or call (403) 849-2233.

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ONTARIO — **Toronto.** Associate needed to practise in a west-end Toronto group on Saturdays and/or evenings for at least one year. Please reply to CDA Box Number 2129.

ONTARIO — **Toronto.** Associate(s) required for full service health centre, full or part-time. Call (416) 865-1011.

Opportunities Available

BRITISH COLUMBIA — **Certified Periodontist.** Large group practice of 21 dentists located in B.C.'s third largest city would like to expand services offered to include that of a periodontist. Facilities include new building, 19 operatories, well-established hygiene department employing 5 hygienists, fully equipped GA room, and computerized accounting services. Abundance of lakes, forests and mountains offer a wide spectrum of recreational activities. Persons interested please contact: Dr. Richard Suen or Dr. Frank Lo, 4122-15th Avenue, Prince George, B.C. V2M 1V9.

ALBERTA — **Dental Practice Available.** The Consort and District Medical Centre Board is seeking a Dentist to open a practice in Consort, Alberta. Financial assistance available and one year of free rent on dental suite. For further information telephone 577-3623, J.P. Trieber, Secretary-Treasurer.

THE UNIVERSITY OF ALBERTA — **Faculty of Dentistry.** Applications are invited for a full-time position as Chairman of the Division of General Practice which includes Dental Auxiliary Utilization Clinic and Mobile Dental Clinic programs. Candidates should have significant experience in clinical care. Duties will include academic administration, teaching and research. Rank and salary are commensurate with education and experience; applicants should be eligible for licensure in the province. The University is an equal opportunity employer. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. All inquiries should be forwarded by January 31, 1983 to Dr. R.L. Ellis, Chairman, Department of Dental Health Care, Faculty of Dentistry, University of Alberta, Edmonton, Alberta, Canada T6G 2N8; (403) 432-3631.

ONTARIO — Ottawa. Paedodontist required for busy paedodontic practice. Opportunity for eventual partnership. For further information please call collect (613) 226-6634.

ONTARIO — Toronto. Community Health Centre, University of Toronto teaching component. Downtown Toronto location. Established practice. Emphasis on preventive dentistry. Full-time position available immediately. Salary commensurate with experience. Administrator: West Central Community Health Centres, 64 Augusta Avenue, Toronto, Ontario M5T 2L1; (416) 364-4107.

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Equipment

EQUIPMENT — Dental equipment wanted for a dental museum. Preferably manufactured prior to 1940 and dating back to late 1850's. Please reply to: Dr. Monty Audenart, Box 239, Vermilion, Alberta T0B 4M0, or call (403) 853-4704.

EQUIPMENT WANTED — Orthopantomograph, 6 Pelton & Crane operating lights, 2 x-ray units, 1 Harvey Chemiclave Steriliser, 1 Dentaleze chair. Contact: Judy Icton, Suite 307, 5880 Spring Garden Road, Halifax, Nova Scotia B3H 1Y1; phone: (902) 425-6800.

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The Membership examinations are normally held in June each year; and the deadline for applications is March 1st. The Fellowship examinations are normally held annually in December; the deadline for applications is August 31st.

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Information concerning the examinations and application forms are available from:

Dr. John E. Speck
Registrar
The Royal College of Dentists of Canada
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Suite 614
Toronto, Ontario
M5G 1G6

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Oral Surgery	November 1
General Practice Residency	December 1
Pedodontics	December 1
Oral Pathology	January 1
Endodontics	February 1
Periodontics	February 1
Prosthodontics	February 1

For applications, bulletin requests, and additional information, please contact:

Office of Admissions and Student Affairs
Dentistry, University Park — MC 0641
University of Southern California
Los Angeles, California 90089-0641

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The Chipman Health Services Center, Chipman, NB, a branch of the Dr. H.M. Gardiner Memorial Hospital, has a dental practice available.

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Secretarial and Office Services are provided through the Health Center. The practice would also serve the town of Minto and surrounding counties.

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Inquiries regarding further details can be addressed to:

D.T. Wilson
Administrator
Dr. H.M. Gardiner Memorial Hospital
Box 309, Minto, NB
EOE 1J0
PHONE 1-506-327-3353

INTERNATIONAL SYMPOSIUM ON BIOMECHANICAL ASPECTS OF PROSTHODONTICS

The Hebrew University-Hadassah Faculty of Dental Medicine, founded by the Alpha Omega Fraternity, in conjunction with the Toronto Alumni Chapter of the Alpha Omega Fraternity, wishes to announce the International Symposium on: "Biomechanical Aspects of Prosthodontics" presented by Professor George Zarb, Chairman of Graduate and Undergraduate Prosthodontics, Faculty of Dentistry, University of Toronto, Canada, to be held in Jerusalem, April 20, 21, 1983.

Practitioners interested in registration and additional information, please contact Professor J. Pietrokovski, Director of Removable Prosthodontics, Department of Oral Rehabilitation, The Hebrew University-Hadassah Faculty of Dental Medicine, P.O.B. 12000, Jerusalem, Israel — or to Dr. Hart Levin, Co-Chairman, 2006 Bathurst Street, Toronto, Canada M5P 3L1, Tel.: (416) 781-2751.

Canadian Dental Association **Journal** de l'Association Dentaire Canadienne

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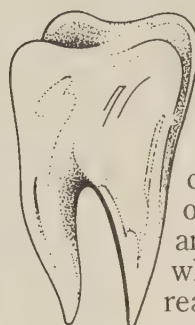
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